

ABSTRACT

Title of Thesis: THE RESILIENT STUDENT-ATHLETE: SUPPORTING
COMMUNITY AND MENTAL WELL-BEING
THROUGH ON-CAMPUS HOUSING

Sarah Anne Wright

Master of Architecture, 2019

Thesis directed by: James Tilghman, Clinical Associate Professor

Young adults who enter their college years as student-athletes face the challenge of balancing their athletic demands with their academic ones, all while transitioning to their future careers as adults. The demand for student-athletes to perform at the highest level possible often begins to push some of them over the edge both physically and mentally. The culture of athletics has not always been supportive of student-athletes with mental illness, therefore, weakening the stigma of mental illness is necessary to encourage student-athletes to begin to seek the help they may truly need.

This thesis explores on-campus housing at the University of Maryland (UMD) that encourages community and a supportive environment for the student-athlete and general student population living there. The community spaces and mental health resources better prepare student-athletes in dealing with mental illness and the stressors they face in college. The organization and aesthetics of the built environment encourage wellness in subtle and direct ways, creating an environment that weaves together mental well-being and everyday living without branding it as a place to be “fixed”. As a result, every individual can learn to thrive within their sport and academics and become resilient to the stressors and demands of their college career and beyond.

THE RESILIENT STUDENT-ATHLETE:
SUPPORTING COMMUNITY AND MENTAL WELL-BEING
THROUGH ON-CAMPUS HOUSING

by

Sarah Anne Wright

Thesis submitted to the Faculty of the Graduate School of the
University of Maryland, College Park in partial fulfillment
of the requirements for the degree of
Master of Architecture
2019

Advisory Committee:

James Tilghman, Clinical Associate Professor, Chair
Matthew Bell, Professor, Committee Member
Karl Du Puy, Professor Emeritus, Committee Member
Irin Zhupa Zendeli, AIA, Professional Mentor

©Copyright by

Sarah Anne Wright

2019

The thesis document that follows has had referenced material removed in respect for the owner's copyright. A complete version of this document, which includes said referenced material, resides in the University of Maryland, College Park's library collection.

ACKNOWLEDGEMENTS

I want to thank everyone who played a part in this thesis. Without them, I would not be where I am today. Thank you to my chair, James Tilghman, who continually challenged me to push the design and to push myself; to Karl Du Puy, who reminded myself and my peers to “be brilliant” every single day; and to Matthew Bell and Irini Zhupa Zendeli for their numerous critiques and pieces of advice. Thank you for allowing me to learn from each one of you and for preparing me for the career ahead.

Thank you to my family and friends for being by my side every step of the way. Whether that was through bringing me meals, check-in phone calls, and everything in between, I wouldn’t have survived without you all. Thank you to my husband, Charlie, for being a constant rock of support throughout this whole year of thesis (and all the other years of grad and undergrad).

Finally, to the group of women in this thesis cohort, I will never forget all of the many memories we made this year. I can’t wait to see how you all change the world.

Table of Contents

List of Figures	v
INTRODUCTION	1
CHAPTER 1 The Student-Athlete Experience in College	3
Academic Environment and Demands in College	5
Athletic Environment and Demands in College	6
Personal and Social Life in College	7
Psychological and Physical Stressors on the Student-Athlete	8
CHAPTER 2 Student-Athletes and Mental Health	13
Mood Disorders	15
Anxiety Disorders	17
Eating Disorders	18
Substance-Related Disorders	20
University of Maryland Counseling Center, Problems, and Initiatives	24
CHAPTER 3 NCAA: Division I Athletics, Rules and Resources	29
Division I	30
Student-Athlete Housing Rules and Effects	30
Mental Health Resources and Best Practices	31
CHAPTER 4 Humans, Space and How Environment Influences Healing	34
The Power of Space	34
Multi-level Influences of Environment	37
Environment, Health and Healing	39
CHAPTER 5 Precedents	43
Student-Athlete Housing	43
Non-Clinical Healing Environments	46
Community Living	50
CHAPTER 6 University of Maryland, Site Selection and Analysis	55
Current Culture of Athletics	55
Housing of Athletes	59
Current Housing Conditions and Plans for Future Housing	61
Site Selection Process	65
Site Analysis	69
CHAPTER 7 Building Program	74
UMD Residential Unit Typologies and Aggregations	74
Proposed Program	77
CHAPTER 8 Design Solution	79
Design Guidelines	79
Early Design Schemes	81
Design Solution	82
CHAPTER 9 Conclusion	92
APPENDIX A UMD Counseling Center 58th Annual Report (2016-2017)	93
APPENDIX B NCAA Core Values	95

APPENDIX C Division I Legislation: 16.5 Housing and Meals	96
APPENDIX D Timeline of Incident Involving Jordan McNair	98
APPENDIX E Facilities Master Plan 2011-2030 and 2017-2030 Update	99
APPENDIX F On-Campus Student Housing Strategic Plan 2014	102
APPENDIX G UMD Residential Unit Typologies and Aggregations.....	106
Bibliography	113

List of Figures

Figure 1. Time management for Division 1 student-athletes (Source: NCAA)	3
Figure 2. Lifestyle breakdown of a student-athlete at Queens University of Charlotte (Source: Nicole Forgione).....	4
Figure 3. Median hours spent per week on academic activities in-season (Source: NCAA)	6
Figure 4. Median hours spent per week on athletic activities in-season (Source: NCAA)	7
Figure 5. Percentage of student-athletes who reported feeling overwhelmed (Source: NCAA)	14
Figure 6. Signs and symptoms of depression (Source: NCAA)	15
Figure 7. Signs and symptoms of suicide (Source: NCAA)	16
Figure 8. Signs and symptoms of anxiety disorders (Source: NCAA)	17
Figure 9. Signs and symptoms of eating disorders (Source: NCAA)	19
Figure 10. Historic trends of social drug use (Source: Thompson)	20
Figure 11. Student-athlete binge drinking (Source: NCAA)	22
Figure 12. Student-athlete illicit drug use (Source: NCAA).....	23
Figure 13. Summary of help-seeker contacts (Source: UMD Division for Student Affairs Counseling Center).....	25
Figure 14. NCAA members (Source: NCAA).....	29
Figure 15. Maslow's hierarchy of needs (Source: Author, Abraham Maslow)	35
Figure 16. Headington Hall (Source: Author, STUDIOARCHITECTURE)	44
Figure 17. Amount of interactions between people in Headington Hall's split wings (Source: Author)	45
Figure 18. Healthcare Center for Cancer Patients (Source: Author, Adam Mørk).....	47
Figure 19. Healthcare Center materials and spatial qualities (Source: Author, Adam Mørk).....	47
Figure 20. Livsrum Cancer Counseling Center (Source: Author, EFFEKT)	48
Figure 21. Livsrum Cancer Counseling Center materials and spatial qualities (Source: Author, Quintin Lake and Thomas Ibsen).....	49
Figure 22. Vejle Psychiatric Hospital (Source: Author, Niels Nygaard).....	51
Figure 23. Extending wards that maximize exposure to nature (Source: Author).....	51
Figure 24. Tautra Monastery (Source: Author, Jensen & Skodvin Architects).....	52
Figure 25. Continuous access to seven centralized courtyards (Source: Author).....	53
Figure 26. Location of the 194 designated student-athlete beds in the 2018-2019 academic year, not to scale (Source: Author)	60
Figure 27. Facilities Master Plan 2017-2030 Update (Source: UMD Facilities Management)	62
Figure 28. 2014 Student Housing Strategic Plan (Source: UMD Department of Resident Life).....	64
Figure 29. Three potential sites on the University of Maryland Campus (Source: Author)	65
Figure 30. Site matrix (Source: Author)	67
Figure 31. Boundary and size of each potential site (Source: Author).....	68
Figure 32. Final chosen site (Source: Author)	68

Figure 33. University of Maryland campus in relation to dorms, dining halls and athletic complexes and fields (Source: Author).....	69
Figure 34. Connections to natural conditions and recreational spaces (Source: Author)	70
Figure 35. Valley created by topography and creek north of site (Source: Author).....	70
Figure 36. Vehicular and pedestrian access to site (Source: Author).....	71
Figure 37. Major axes and view corridors on site (Source: Author)	72
Figure 38. Sources of noise around site (Source: Author).....	72
Figure 39. Comparison of five residence halls and association between unit type and communal spaces (Source: Author)	75
Figure 40. Journeys of interaction and community-making (Source: Author).....	76
Figure 41. Program tabulation (Source: Author)	78
Figure 42. Color-coded program per floor plan (Source: Author).....	78
Figure 43. NCAA student-athlete housing requirements (Source: Author)	80
Figure 44. Design guidelines (Source: Author)	81
Figure 45. Programmatic studies (Source: Author)	81
Figure 46. Schematic options (Source: Author)	82
Figure 47. Site plan, not to scale (Source: Author).....	83
Figure 48. Bird's eye view of south recreation fields and student hub (Source: Author)	84
Figure 49. Plaza perspective from southeast (Source: Author)	84
Figure 50. Lower level floor plan, not to scale (Source: Author).....	85
Figure 51. Ground floor plan, not to scale (Source: Author).....	86
Figure 52. View of north patio and lawn (Source: Author).....	87
Figure 53. Typical floor plan A, not to scale (Source: Author).....	88
Figure 54. Typical floor plan B, not to scale (Source: Author)	88
Figure 55. North-south section/West elevation, not to scale (Source: Author).....	89
Figure 56. East-west section/South elevation, not to scale (Source: Author).....	89
Figure 57. Unit typologies, not to scale (Source: Author).....	90
Figure 58. Solarium and lounge environment (Source: Author)	91
Figure 59. Final thesis presentation boards (Source: Author)	92

INTRODUCTION

*“College student-athletes represent a special population on hundreds of campuses across the nation. They are young people who lead stressful lives that are influenced by the unique demands of their lifestyles and the developmental challenges of college-age people. Special services are needed to assist them to cope with these demands and ultimately to become well-adjusted, successful adults.” – Counseling College Student-Athletes: Issues and Interventions*¹

The lives and psychological development of student-athletes are greatly affected by both the positive and negative effects of participation in intercollegiate athletics.² Unfortunately, this population is often viewed as over-privileged, pampered, lazy and out of control even though they are one of the most diverse groups of people on today's college campuses, especially in terms of personal history, academic preparedness, life goals and expectations, physical and psychological skills and developmental readiness.³ Due to these biases, student-athletes have been historically denied special services that would better prepare and guide them throughout their college careers.

The culture of collegiate and professional athletics has historically not been one of support even with the rise of mental illness among student-athletes. Though physical injuries may be addressed and healed, oftentimes the minds of these individuals are not

¹ Edward F. Etzel, A.P. Ferrante, and James W. Pinkney, *Counseling College Student-Athletes: Issues and Interventions, Second Edition* (Morgantown, WV: Fitness Information Technology, Inc., 1996), 3.

² Etzel et al., *Counseling College Student-Athletes*, 4.

³ Etzel et al., *Counseling College Student-Athletes*, 4.

provided for or considered. Furthermore, the stigma of appearing weak or vulnerable to the rest of the team, coaches or staff prevents many student-athletes from seeking the help they need. High visibility and a constant spotlight on student-athletes can add even more pressure to mask an already stressful situation.

The mental well-being of student-athletes has become a timely subject to address. College students across the nation are protesting the lack of mental health resources on their campuses. Professional athletes are opening up to their teams, coaches and fans about their struggles with mental illness. Athletic departments are being criticized for their poor treatment of students as both athletes and human beings. This problem has only recently started to be addressed with certain initiatives from the National Collegiate Athletic Association (NCAA) that will be discussed later. But even with these new services and resources, student-athletes still face many physical and mental challenges that can affect their entire future. The time has come to address the needs of college student-athletes so that they can grow and develop into healthy young adults.

CHAPTER 1 | The Student-Athlete Experience in College

Student-athletes face the challenge of balancing the demands of their sport and academic schedules every day of their college career (see two different break downs of how student-athletes spend their time in Figure 1 and Figure 2). When this becomes difficult or when other situations in their personal lives arise, many of them begin to struggle with mental illness. The onset of a mental disorder can quickly influence all aspects of a student-athlete's life and can create even more obstacles to competing at a high level in their respective sport.

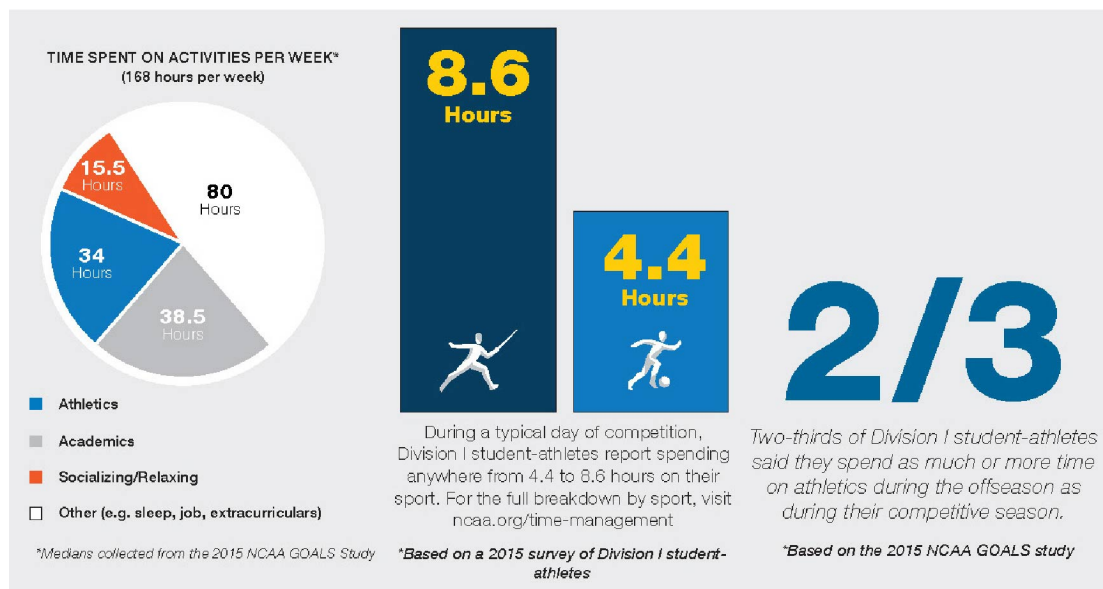


Figure 1. Time management for Division 1 student-athletes (Source: NCAA)

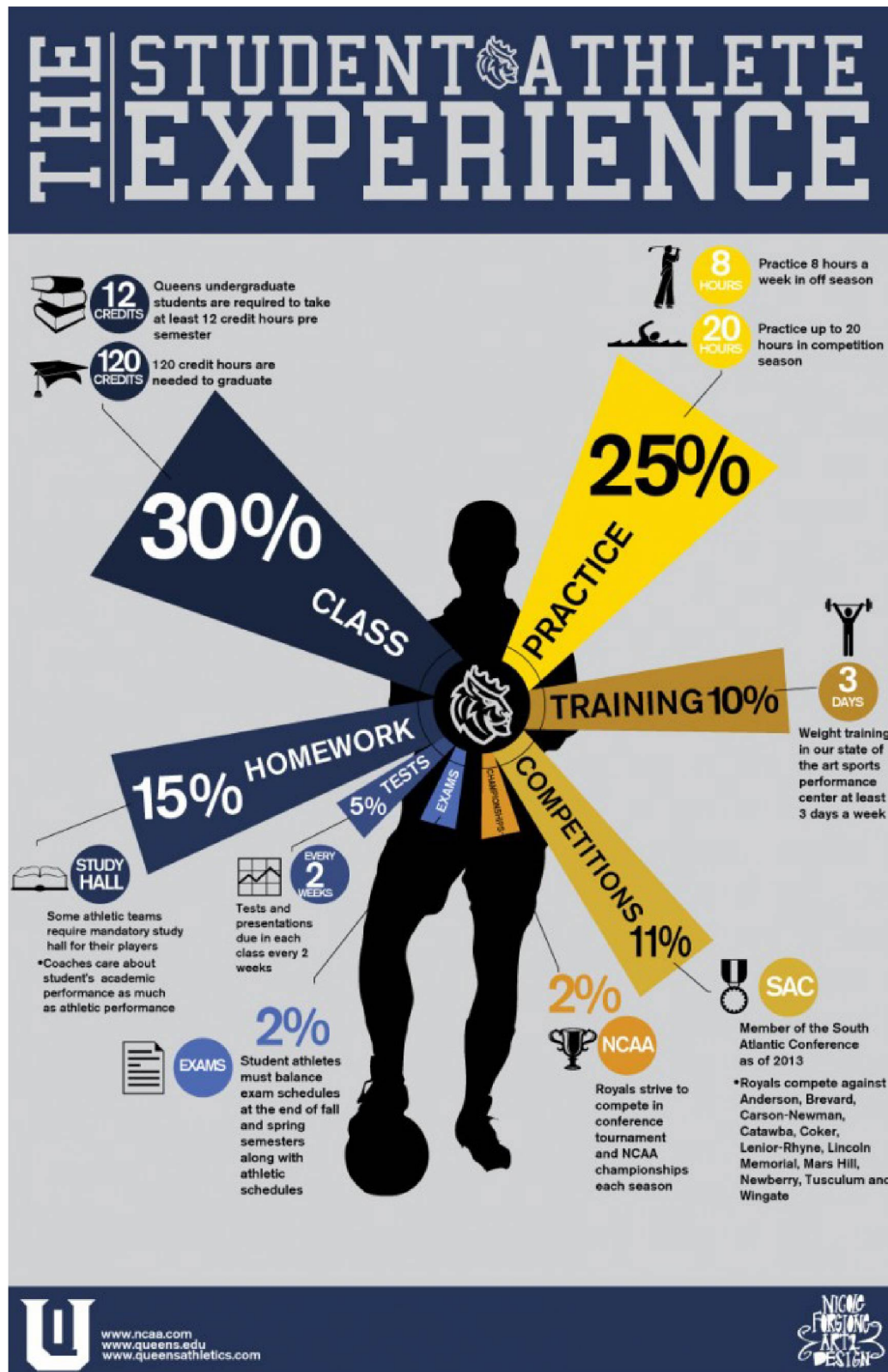


Figure 2. Lifestyle breakdown of a student-athlete at Queens University of Charlotte
(Source: Nicole Forgione)

Academic Environment and Demands in College

Student-athletes are first and foremost students, however, colleges and universities often focus on them to primarily produce “highly visible and profitable winning teams.”⁴ But as students, they face the same challenges as non-athlete students at their college or university. This includes attending classes, studying and completing required assignments and successfully passing exams. Division I and Division II student-athletes spend 38.5 hours a week on academics in-season, while Division III student-athletes spend 40.5 hours (Figure 3).⁵ Oftentimes, the “completion of regular class work demands time that they often have little of because of their extensive formal and informal athletic commitments, which are for many, year-round realities.”⁶ When a student-athlete begins to struggle with or even fail to complete these tasks, it can greatly affect all aspects of their current situation or even future career. For example, a student-athlete who fails in the classroom can begin to experience great personal distress. This can then jeopardize their athletic eligibility and participation and also threaten their current levels of performance and psychological well-being.⁷ It is important for student-athletes to be able to meet these academic challenges because “this ability or lack of it will likely influence their personal identities as well as their occupational opportunities.”⁸

⁴ M. Sperber, *College sports inc.: The athletic department versus the university* (New York: Henry Holt, 1990), quoted in Edward F. Etzel, A.P. Ferrante and James W. Pinkney, *Counseling College Student-Athletes: Issues and Interventions, Second Edition* (Morgantown, WV: Fitness Information Technology, Inc., 1996), 5.

⁵ NCAA, “Results from the 2015 GOALS Study of the Student-Athlete Experience,” NCAA Convention (2016), http://www.ncaa.org/sites/default/files/GOALS_convention_slidebank_jan2016_public.pdf, 35.

⁶ Etzel et al., *Counseling College Student-Athletes*, 5.

⁷ Etzel et al., *Counseling College Student-Athletes*, 5.

⁸ Etzel et al., *Counseling College Student-Athletes*, 5.

Median Hours Spent Per Week on Academic Activities In-Season (2015 SA Self-Report)

Division I							
	Baseball	Men's Basketball	Football (FBS/FCS)		All Other Men's Sports	Women's Basketball	All Other Women's Sports
Academic Hours	34	34	37	37	36	37	41
Division II							
Academic Hours	34	34	37		36	42	42
Division III							
Academic Hours	36	37	38		41	44	44

Notes: Yellow indicates median up 2 hours/week or more vs. 2010 study. Green indicates median down by 2 hours/week or more vs. 2010.

Figure 3. Median hours spent per week on academic activities in-season (Source: NCAA)

Athletic Environment and Demands in College

The student-athlete's second responsibility is that of being an athlete. During the season, Division I student-athletes spend an average of 34 hours a week on athletic-related activities, Division II student-athletes spend an average of 32 hours a week and Division III student-athletes spend 28.5 hours a week (Figure 5).⁹ Even though the NCAA limits practice time to no more than twenty hours per week, student-athletes often give more than that to structured and informal activities, including conditioning, "voluntary" team meetings and workouts, care of minor physical problems, rehabilitation,

⁹ NCAA, "Results from the 2015 GOAL Study," 32.

mental preparation for competitions, meetings with coaches, interaction with media and community service.¹⁰

Median Hours Spent Per Week on Athletic Activities In-Season (2015 SA Self-Report)

Division I							
	Baseball	Men's Basketball	Football (FBS/FCS)		All Other Men's Sports	Women's Basketball	All Other Women's Sports
Athletic Hours	40	34	42	41	32	35	32
Division II							
Athletic Hours	37	32	36		30	32	31
Division III							
Athletic Hours	34	29	31		27	29	27

Notes: Yellow indicates median up 2 hours/week or more vs. 2010 study. Green indicates median down by 2 hours/week or more vs. 2010.

Figure 4. Median hours spent per week on athletic activities in-season (Source: NCAA)

Personal and Social Life in College

Student-athletes are also unique, individual people that face the same “growing up” lessons as their peers. In addition to becoming independent adults, they must “make major life decisions relating to a sense of purpose, an occupation, and a career path, cultivating lasting and meaningful relationships, and identifying and modifying personal values regarding love, sexuality, friendship, and trust.”¹¹ These are challenging tasks on a personal level, but even more so in academic and athletic environments.

¹⁰ Etzel et al., *Counseling College Student-Athletes*, 6.

¹¹ Etzel et al., *Counseling College Student-Athletes*, 6.

Psychological and Physical Stressors on the Student-Athlete

Many student-athletes often report an amount of stress that is atypical of normal college students and represents a problem that can influence an individual's functioning and personal development on a daily basis.¹² Student-athletes face "complex internal and external stressors that seem to make them more vulnerable than most college students to encounter greater frequencies and higher levels of personal-social distress."¹³ Many of these internal and external stressors are discussed below.

Student-athletes who receive athletic scholarships often face more stress than others because of the amount of pressure they put on themselves (or feel from coaches and staff) to maintain a high level of performance in all aspects of their college career so as not to lose their scholarship.¹⁴ Injuries can add even more stress, and the effects of stress can actually lead to a higher risk of injury. An injury can ultimately end an individual's athletic career, forcing them to cope with this loss, which they are often unprepared to do.¹⁵

Even though many colleges and universities offer counseling, health and career services to all full-time students, student-athletes face barriers to utilizing these services and they then tend to be underutilized. Some of these barriers include "the student-athlete's high visibility on campus, little available time, myths about the student-athlete persona, the closed nature of many athletic situations, the personal attributes of the

¹² Etzel et al., *Counseling College Student-Athletes*, 9.

¹³ Etzel et al., *Counseling College Student-Athletes*, 9.

¹⁴ W. Lanning, "The privilege few: Special counseling needs of athletes," *Journal of Sport Psychology*, 4 (1982): 19-23, quoted in Edward F. Etzel, A.P. Ferrante and James W. Pinkney, *Counseling College Student-Athletes: Issues and Interventions, Second Edition* (Morgantown, WV: Fitness Information Technology, Inc., 1996), 9.

¹⁵ Etzel et al., *Counseling College Student-Athletes*, 10.

student-athletes themselves and often the fear of loss of status for seeking counseling assistance.”¹⁶

Student-athletes are highly visible to others on campus and within their communities. Because of this they are constantly made aware of their public image and how a small or large mistake in their respective sport can change how others think of them. Therefore student-athletes often “live, study, play, and develop under conditions that usually make a ‘normal’ college experience difficult, if not at times impossible.”¹⁷ Student-athletes may be hesitant to visit a counseling center on campus because of this high visibility and the possibility that they would be perceived as “needing help” by other students, their teammates or coaches and staff.¹⁸

Hours spent in practice and competition plus time spent on academics can leave student-athletes with very little opportunity to get the help they need. Any time that a student-athlete does have to access counseling or health services is often when these services are unavailable. These services are usually accessible during the morning and afternoon while student-athletes are attending class and practice but aren’t accessible after five o’clock.¹⁹ These time constraints and availability often limit any opportunity that student-athletes have to seek help.

Many believe the myth that athletic departments themselves meet the needs of their student-athletes in terms of counseling and health services. However, it’s been found that most athletic advisors or counselors are trained in academics and do not have professional expertise that can address student-athletes’ personal, social and

¹⁶ Etzel et al., *Counseling College Student-Athletes*, 10-11.

¹⁷ Etzel et al., *Counseling College Student-Athletes*, 8-9.

¹⁸ Etzel et al., *Counseling College Student-Athletes*, 11.

¹⁹ Etzel et al., *Counseling College Student-Athletes*, 12.

developmental concerns.²⁰ Another myth that many believe is that student-athletes must feel well because they are constantly pampered with perks such as special admissions criteria, separate dining facilities, preferential class scheduling and tutoring.^{21,22} If these myths continue, many student-athletes will still be denied resources and beneficial services that can address the challenges they face as individuals. Student-athletes may also be “openly or indirectly discouraged from seeking available campus services by coaches and athletic department personnel who imply or suggest that the student-athlete’s situation may not be understood or cared about by outsiders.”²³ And while seeking help from someone who understands the culture of athletics is important, these myths are detrimental to helping student-athletes understand the true need that they have in this kind of environment.

Sometimes athletic departments see themselves or are perceived as autonomous entities. This closed environment may encourage student-athletes to “ignore available campus services and to look instead to athletic staff and teammates for needed support, when outside professional assistance probably would be more beneficial.”²⁴ Efforts to protect or control student-athletes can become detrimental to their well-being because it prevents them from assuming personal responsibility or from growing through experience.²⁵

²⁰ Etzel et al., *Counseling College Student-Athletes*, 12.

²¹ Etzel et al., *Counseling College Student-Athletes*, 13.

²² J. Hipple, “Do athletes have special counseling needs?” *Texas Personnel and Guidance Association*, 19 (1991): 57-62, quoted in Edward F. Etzel, A.P. Ferrante and James W. Pinkney, *Counseling College Student-Athletes: Issues and Interventions, Second Edition* (Morgantown, WV: Fitness Information Technology, Inc., 1996), 13.

²³ Etzel et al., *Counseling College Student-Athletes*, 13.

²⁴ Etzel et al., *Counseling College Student-Athletes*, 14.

²⁵ Etzel et al., *Counseling College Student-Athletes*, 15.

Student-athletes can create barriers to seeking help themselves because they assume that “athletes are supposed to be tough and that tough people just ‘suck it up’ or ‘tough it out.’”²⁶ This leads to both male and female students avoiding the help they need because they believe “only weak people admit that they could benefit from someone else’s help.”^{27,28,29} Some student-athletes may go so far as to try to cope with their problems on their own through alcohol or drug use.³⁰ Those who do take initiative to seek help may do so with the expectation of a quick fix, which is an erroneous assumption and can hinder true healing.³¹ Finally, student-athletes may avoid seeking help because of the belief that it may threaten or diminish their role on their team or in their relationships with others.³²

These numerous internal and external barriers to seeking assistance or counseling services need to be addressed and debunked where necessary. Increasing accessibility and encouraging it can only be “to the benefit of the student-athletes and the institutions they so visibly represent.”³³ Universities and colleges and their athletic departments must have

²⁶ Etzel et al., *Counseling College Student-Athletes*, 16.

²⁷ D. Linder, B. Brewer, J. Van Raalte, and N. DeLange, “A negative halo for athletes who consult sports psychologists: Replication and extension,” *Journal of Sport and Exercise Psychology*, 13 (1991): 133-148, quoted in Edward F. Etzel, A.P. Ferrante and James W. Pinkney, *Counseling College Student-Athletes: Issues and Interventions, Second Edition* (Morgantown, WV: Fitness Information Technology, Inc., 1996), 16.

²⁸ D. Linder, D. Pillow, and R. Reno, “Shrinking jocks: Derogation of athletes who consults a sport psychologist,” *Journal of Sport and Exercise Psychology*, 11 (1989): 270-280, quoted in Edward F. Etzel, A.P. Ferrante and James W. Pinkney, *Counseling College Student-Athletes: Issues and Interventions, Second Edition* (Morgantown, WV: Fitness Information Technology, Inc., 1996), 16.

²⁹ J. Van Raalte, B. Brewer, D. Brewer, and D. Linder, “NCAA Division II college football players’ perceptions of an athlete who consults a sport psychologist,” *Journal of Sport and Exercise Psychology*, 14 (1992): 273-282, quoted in Edward F. Etzel, A.P. Ferrante and James W. Pinkney, *Counseling College Student-Athletes: Issues and Interventions, Second Edition* (Morgantown, WV: Fitness Information Technology, Inc., 1996), 16.

³⁰ Etzel et al., *Counseling College Student-Athletes*, 16.

³¹ Etzel et al., *Counseling College Student-Athletes*, 16.

³² Etzel et al., *Counseling College Student-Athletes*, 17.

³³ Etzel et al., *Counseling College Student-Athletes*, 18.

the “capacity and willingness to promote more effectively the growth and development of the student-athlete as a whole person, a whole person who will master the developmental tasks of young adulthood, actively pursue a course of study that possesses relevance to his or her life, and, it is hoped, graduate in a timely fashion.”³⁴ Implemented programs and services must address student-athletes’ concerns about academic, athletic and personal struggles as a whole.

³⁴ Etzel et al., *Counseling College Student-Athletes*, 18.

CHAPTER 2 | Student-Athletes and Mental Health

A student-athlete's mental health is often mistakenly viewed as a secondary matter, less important than addressing their physical health. However, an individual's mental health is every bit as important since it would be irrational to separate the "mind" and "body".³⁵ Injuries and medical conditions due to sports can have psychological or emotional consequences and mental health challenges such as depression can increase risk of injury.³⁶ Student-athletes are just as likely as their non-athlete peers to struggle with many different concerns and issues in college.³⁷

Student-athletes particularly struggle with "depression, thoughts of suicide, anxiety, loneliness, dysfunctional family experiences, eating disorders, child sexual assault, and issues related to sexual health."^{38,39,40,41} Thirty percent of the student-athletes

³⁵ Ron A. Thompson, Roberta Trattner Sherman, and Bloomington Center for Counseling and Human Development, "Managing Student-Athletes' Mental Health Issues" (National Collegiate Athletic Association, 2007), accessed October 21, 2018, https://www.ncaa.org/sites/default/files/2007_managing_mental_health_0.pdf, 2.

³⁶ Ron A. Thompson, et.al., "Managing Student-Athletes' Mental Health Issues", 2.

³⁷ Etzel et al., *Counseling College Student-Athletes*, 38.

³⁸ J. Bell and T. Doege, "Athletes' use and abuse of drugs," *The Physician and Sportsmedicine*, 15 (1987): 99-108, quoted in Edward F. Etzel, A.P. Ferrante and James W. Pinkney, *Counseling College Student-Athletes: Issues and Interventions, Second Edition* (Morgantown, WV: Fitness Information Technology, Inc., 1996), 38.

³⁹ S.R. Heyman, "Psychological problem patterns found with athletes," *The Clinical Psychologist*, 34 (1986): 68-71, quoted in Edward F. Etzel, A.P. Ferrante and James W. Pinkney, *Counseling College Student-Athletes: Issues and Interventions, Second Edition* (Morgantown, WV: Fitness Information Technology, Inc., 1996), 38.

⁴⁰ B.C. Ogilvie, W.P. Morgan, C.M. Pierce, D.B. Marcotte, and A.J. Ryan, "The emotionally disturbed athlete," *The Physician and Sportsmedicine*, 9 (1981): 67-80, quoted in Edward F. Etzel, A.P. Ferrante and James W. Pinkney, *Counseling College Student-Athletes: Issues and Interventions, Second Edition* (Morgantown, WV: Fitness Information Technology, Inc., 1996), 38.

⁴¹ L.W. Rosen, D.B. McKeag, D.O. Hough, and V. Curley, "Pathogenic weight control behavior in female athletes," *The Physician and Sportsmedicine*, 14 (1986): 79-86, quoted in Edward F. Etzel, A.P. Ferrante and James W. Pinkney, *Counseling College Student-Athletes: Issues and Interventions, Second Edition* (Morgantown, WV: Fitness Information Technology, Inc., 1996), 38.

involved in the NCCA 2015 GOALS Study reported feeling overwhelmed at some point over the past month (Figure 5).⁴² A third of student-athletes in the study reported that they struggled to find the energy to do other tasks due to the physical demands of their sport.⁴³ Almost a quarter of these student-athletes also reported feeling exhausted from the mental demands of their sport.⁴⁴ The following sections look at different sorts of disorders prevalent among student-athletes and the effects on their behavioral, cognitive, emotional and psychological, and physical and medical well-being.

In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?
(% Responding Very Often or Fairly Often)

Baseball	Men's Basketball	Football FBS FCS		Men's Other	Women's Basketball	Women's Other
Division I						
29%	35%	36%	34%	25%	30%	30%
Division II						
31%	27%	35%		28%	27%	34%
Division III						
25%	20%	32%		25%	30%	28%

Note: Endorsement of top two scale points on a 6-point scale.


 Up 5% or more from 2010



Figure 5. Percentage of student-athletes who reported feeling overwhelmed (Source: NCAA)

⁴² NCAA, "Results from the 2015 GOAL Study," 119.

⁴³ NCAA, "Results from the 2015 GOAL Study," 119.

⁴⁴ NCAA, "Results from the 2015 GOAL Study," 119.

Mood Disorders

Mood disorders, often simply called “depression,” are one of the more frequently occurring illnesses among Americans as well as among student-athletes. About “10 percent of the American population suffers from a mood disorder during any one-year period, which is the same percentage of depression in college students as reported by the National Mental Health Association.”⁴⁵ Depression can develop from a number of situations including a specific event in an individual’s life, biological or neurobiological factors, negative thought patterns or participation in sports (i.e. due to injury or “overtraining syndrome”).⁴⁶ The signs and symptoms of depression are listed in Figure 6.



Signs and symptoms:

- Persistent sadness or empty mood.
- Dramatic changes in sleep, appetite, concentration and energy.
- Lack of interest in activities.
- Hopelessness or guilty thoughts.
- Physical aches and pains.
- Suicidal thoughts.

Figure 6. Signs and symptoms of depression (Source: NCAA)

Depression often affects all aspects of a person’s life and among student-athletes this can lead to poorer performance in their respective sport.⁴⁷ Poor performance can increase a student-athlete’s depression even more and also increase their risk of injury.⁴⁸

⁴⁵ Ron A. Thompson, et.al., “Managing Student-Athletes’ Mental Health Issues”, 5.

⁴⁶ Ron A. Thompson, et.al., “Managing Student-Athletes’ Mental Health Issues”, 6-7.

⁴⁷ Ron A. Thompson, et.al., “Managing Student-Athletes’ Mental Health Issues”, 6.

⁴⁸ Ron A. Thompson, et.al., “Managing Student-Athletes’ Mental Health Issues”, 6.

Student-athletes are more prone to injury when depressed because they can become distracted and less alert, which can result in slower physical responses and poor decision-making.⁴⁹

Depression and other mood disorders can increase the possibility of suicide attempts. In 2016, 13,525 suicides among individuals between the ages of ten and 34 made suicide the second-leading cause of death for that age group, after unintentional injury.⁵⁰ In a nine-year study published in 2015, among the 3,773,309 student-athletes, there were a total of 477 reported deaths, with 35 cases of suicide.⁵¹ The relationship between depression and suicidal risks shows that it is imperative to respond to and take immediate action when student-athletes show any of the symptoms in Figures 6 and 7. It is the University's duty to its students and the coaches' and staff's duty to their athletes to provide the best possible services to them so they can live happy and healthy lives throughout their college years and into adulthood.



Warning signs – any of the behaviors below indicate an increased risk of suicide:

- Talking, writing or thinking about death.
- Impulsive, aggressive or reckless behavior.
- Increased alcohol and drug use.
- Social withdrawal from friends, family and the community.
- Dramatic mood swings.

Figure 7. Signs and symptoms of suicide (Source: NCAA)

⁴⁹ Ron A. Thompson, et.al., “Managing Student-Athletes’ Mental Health Issues”, 8.

⁵⁰ National Center for Health Statistics (NCHS), National Vital Statistics System, and Centers for Disease Control and Prevention (CDC), “10 Leading Causes of Death by Age Group, United States, 2016,” https://www.cdc.gov/injury/images/lc-charts/leading_causes_of_death_age_group_2016_1056w814h.gif.

⁵¹ A.L. Rao, I.M. Asif, J.A. Drezner, B.G. Toresdahl, and K.G. Harmon, “Suicide in National Collegiate Athletic Association (NCAA) Athletes: A 9-Year Analysis of the NCAA Resolutions Database,” *Sports Health*, 7(5) (September 2015), 453.

Anxiety Disorders

Anxiety disorders are another common disorder that student-athletes face, just like many other Americans. Anxiety disorders are the most common type of mental illness in the United States, affecting approximately 40 million people over the age of 18 each year.⁵² There are many different kinds of anxiety disorders including generalized anxiety disorder, panic attacks or panic disorder, obsessive compulsive disorders and phobias, and an individual may have more than one kind of anxiety disorder or other disorders such as depression.⁵³ Even though some of the fears of these anxiety disorders are often irrational, many of them are a result of an actual experience or traumatic event.⁵⁴ The signs and symptoms of anxiety disorders are listed in Figure 8.



Signs and symptoms:

EMOTIONAL SYMPTOMS

- Feelings of apprehension or dread.
- Feeling tense or jumpy.
- Restlessness or irritability.
- Anticipating the worst and being watchful for signs of danger.

PHYSICAL SIGNS

- Pounding or racing heart and shortness of breath.
- Sweating, tremors and twitches.
- Headaches, fatigue and insomnia.
- Upset stomach, frequent urination and diarrhea.

Figure 8. Signs and symptoms of anxiety disorders (Source: NCAA)

⁵² Ron A. Thompson, et.al., “Managing Student-Athletes’ Mental Health Issues”, 13.

⁵³ Ron A. Thompson, et.al., “Managing Student-Athletes’ Mental Health Issues”, 14-15, 18.

⁵⁴ Ron A. Thompson, et.al., “Managing Student-Athletes’ Mental Health Issues”, 15.

While some anxiety can be good for student-athletes when it comes to performing, it can often become an obstacle by negatively affecting concentration.⁵⁵ Student-athletes can be distracted by both physical and psychological symptoms of their anxiety before, during and even after events or competitions.⁵⁶ Continuing to participate in a sport can be helpful in monitoring and managing one's symptoms or it could continue to be another stressor to already-existing symptoms. Coaches and staff must recognize their role in helping students manage their stress and anxiety and do so possibly through the direction of a sports psychologist.

Eating Disorders

Eating disorders are not only disorders of eating, but mental disorders that exhibit themselves through different eating and weight-related symptoms.⁵⁷ This type of disorder is very common among college-age females, though ten to 25 percent of individuals with eating disorders are male.⁵⁸ Genetics, personality, socio-cultural pressures regarding thinness, social learning and family issues can cause eating disorders, and even certain aspects of sport environments can increase an individual's risk.⁵⁹ Eating disorders are typically seen more among cross-country, diving, gymnastics, lightweight rowing and wrestling student-athletes than others.⁶⁰ Oftentimes these disorders begin as a weight loss method but can become greater means to coping with life.⁶¹ Eating disorders include a

⁵⁵ Ron A. Thompson, et.al., "Managing Student-Athletes' Mental Health Issues", 16

⁵⁶ Ron A. Thompson, et.al., "Managing Student-Athletes' Mental Health Issues", 16.

⁵⁷ Ron A. Thompson, et.al., "Managing Student-Athletes' Mental Health Issues", 19.

⁵⁸ Ron A. Thompson, et.al., "Managing Student-Athletes' Mental Health Issues", 19.

⁵⁹ Ron A. Thompson, et.al., "Managing Student-Athletes' Mental Health Issues", 19.

⁶⁰ Ron A. Thompson, et.al., "Managing Student-Athletes' Mental Health Issues", 19.

⁶¹ Ron A. Thompson, et.al., "Managing Student-Athletes' Mental Health Issues", 20.

whole range of unhealthy eating due to dietary constraints or clinical eating disorders.⁶²

Different types of eating disorders include anorexia nervosa (“anorexia”), bulimia nervosa (“bulimia”), eating disorder not otherwise specified (EDNOS) including binge eating disorder and any other disordered eating.⁶³ The signs and symptoms of eating disorders are listed in Figure 9.



Signs and symptoms:

- Obsession with food and exercise.
- Denying self of food to the point of starvation.
- Binge eating and purging behaviors.
- Compulsive exercise beyond what is good for sport performance and health.
- Social withdrawal.
- Fear of eating in public.

Figure 9. Signs and symptoms of eating disorders (Source: NCAA)

Even though mood and anxiety disorders can affect performance, eating disorders probably have the biggest influence on performance.⁶⁴ Student-athletes with eating disorders typically do not have adequate nutrition and therefore tend to be malnourished, dehydrated, depressed, anxious and obsessed on top of having low concentration and ability to play with emotion.⁶⁵ Inadequate nutrition can lead to even higher risks of muscle-related injury and weakness.⁶⁶ Again, coaches and staff play a huge part in

⁶² Ron A. Thompson, et.al., “Managing Student-Athletes’ Mental Health Issues”, 20.

⁶³ Ron A. Thompson, et.al., “Managing Student-Athletes’ Mental Health Issues”, 20-21.

⁶⁴ Ron A. Thompson, et.al., “Managing Student-Athletes’ Mental Health Issues”, 21.

⁶⁵ Ron A. Thompson, et.al., “Managing Student-Athletes’ Mental Health Issues”, 21.

⁶⁶ Ron A. Thompson, et.al., “Managing Student-Athletes’ Mental Health Issues”, 21.

assisting a student-athlete in making the right choice when it comes to participating in sports, especially when dealing with a mental disorder.

Substance-Related Disorders

“Substance” can refer to a variety of legal, illegal, prescribed, over-the-counter and performance-enhancing drugs or chemicals. Alcohol, stimulant-type substances, marijuana and anabolic steroids are some of the more common substances used among student-athletes. Figure 10 shows the historic trends of social drug use from 1989 to 2005 from a 2005 NCAA study.

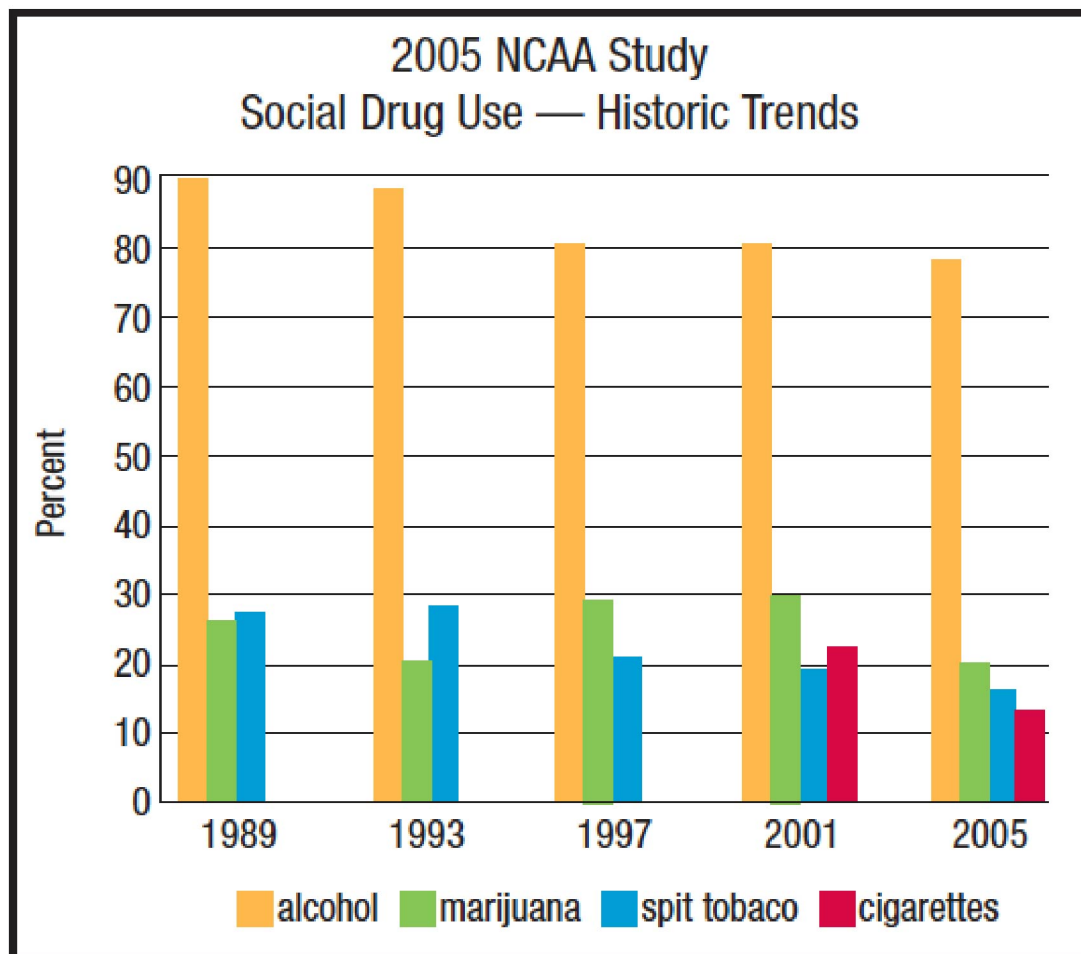


Figure 10. Historic trends of social drug use (Source: Thompson)

In a 2017 NCAA study, 77 percent of student-athletes reported using alcohol in the last year, a slight decrease from previous years.⁶⁷ Forty two percent of surveyed student-athletes said they engage in binge drinking, which has also decreased since 2009 (Figure 11).⁶⁸ Because alcohol is a central nervous system depressant, it can decrease concentration, coordination, reaction time, strength, power and endurance and also inhibit the body's ability to absorb nutrients.⁶⁹ It can therefore greatly affect a student-athlete's performance. Although almost 60 percent of surveyed student-athletes believed that alcohol does not affect their athletic performance, 30 percent also admitted that they had performed poorly during practice or a competition because of alcohol or drug use.⁷⁰ Many student-athletes use alcohol recreationally, but others may use it to calm themselves or make them feel more relaxed, avoid or manage anxiety, help them sleep or to respond to being depressed.⁷¹

⁶⁷ NCAA, "NCAA National Study on Substance Use Habits of College Student-Athletes," Executive Summary (2018), http://www.ncaa.org/sites/default/files/2017RES_Substance_Use_Executive_Summary_FINAL_20180611.pdf, 1.

⁶⁸ NCAA, "NCAA National Study on Substance Use Habits," 1.

⁶⁹ Ron A. Thompson, et.al., "Managing Student-Athletes' Mental Health Issues", 25.

⁷⁰ Ron A. Thompson, et.al., "Managing Student-Athletes' Mental Health Issues", 26.

⁷¹ Ron A. Thompson, et.al., "Managing Student-Athletes' Mental Health Issues", 26.

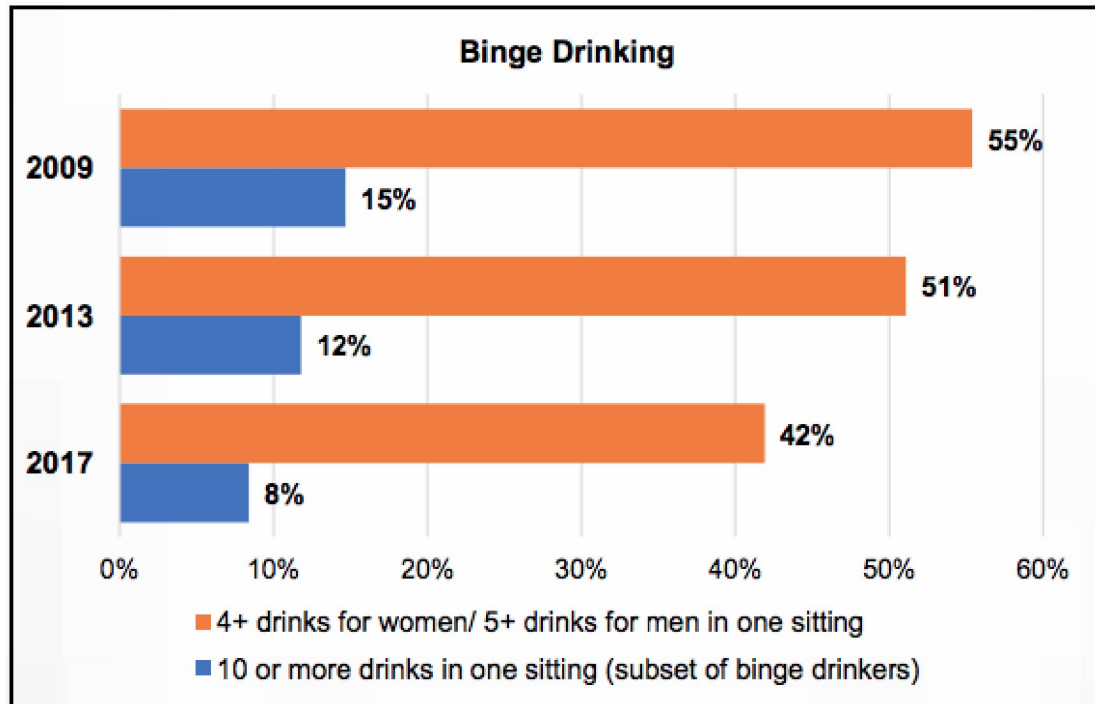


Figure 11. Student-athlete binge drinking (Source: NCAA)

Commonly-used stimulant-type substances among student-athletes include amphetamines, cocaine, ephedrine, and medications for Attention Deficit and Hyperactivity Disorder (ADHD) (Figure 12). Unlike alcohol, these substances are stimulants, which speed up the nervous system. Even though reported use of amphetamines and cocaine is small (four percent or less), it has been increasing among student-athletes in recent years while ephedrine use has remained the same.⁷² Many student-athletes take these substances because they want to perform better due to being more energetic and alert. However, these drugs can make an individual feel nervous or jittery and can negatively affect fine motor coordination and concentration.⁷³ These drugs also increase heart rate, blood pressure, body heat production and body temperature,

⁷² Ron A. Thompson, et.al., “Managing Student-Athletes’ Mental Health Issues”, 27.

⁷³ Ron A. Thompson, et.al., “Managing Student-Athletes’ Mental Health Issues”, 28.

which can negatively affect performance as well.⁷⁴ Overexertion due to feeling overly energetic can lead to injury or even death.⁷⁵

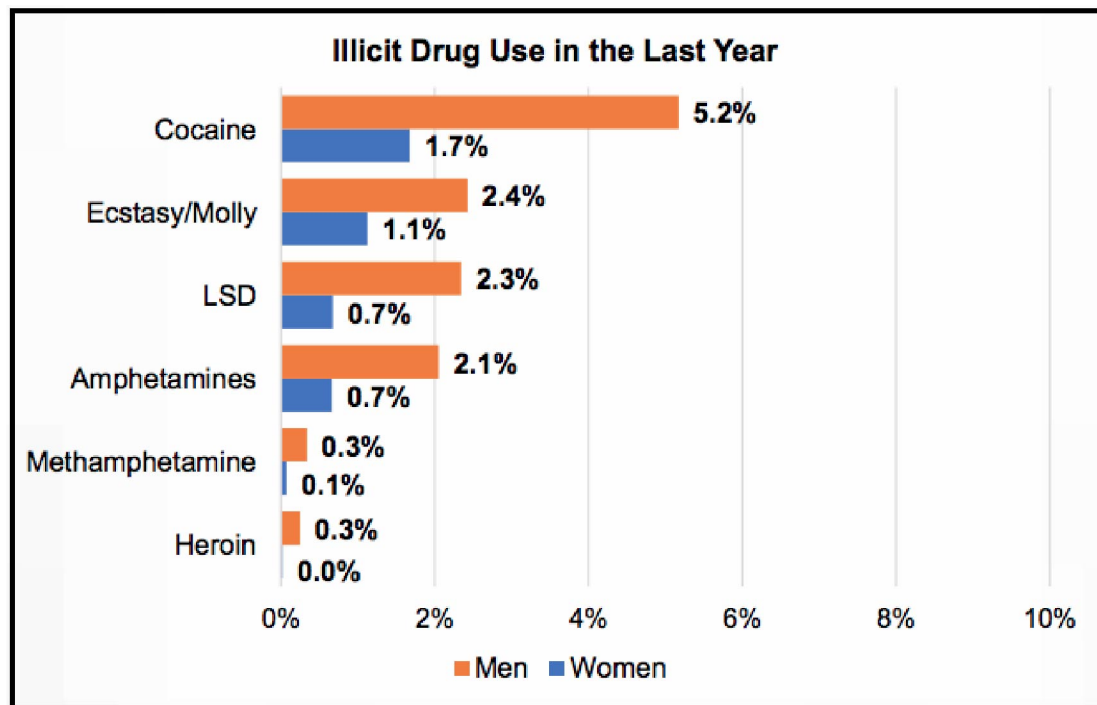


Figure 12. Student-athlete illicit drug use (Source: NCAA)

Marijuana is the “most widely used illegal drug by the general population” and is also the drug of choice among college students and student-athletes.⁷⁶ Marijuana use in 2017 was lower among surveyed student-athletes than non-athletes, but 24 percent reported inhaling marijuana and 11 percent reported using edible forms.⁷⁷ Marijuana, like alcohol, slows reaction time, impairs motor and hand-eye coordination and affects time perception.⁷⁸

⁷⁴ Ron A. Thompson, et.al., “Managing Student-Athletes’ Mental Health Issues”, 28.

⁷⁵ Ron A. Thompson, et.al., “Managing Student-Athletes’ Mental Health Issues”, 28.

⁷⁶ Ron A. Thompson, et.al., “Managing Student-Athletes’ Mental Health Issues”, 28.

⁷⁷ NCAA, “NCAA National Study on Substance Use Habits,” 3.

⁷⁸ Ron A. Thompson, et.al., “Managing Student-Athletes’ Mental Health Issues”, 29.

Less than two percent of student-athletes report using steroids, which coincides with its downward trend of use.⁷⁹ Steroid use can boost athletic performance by increasing muscle mass and therefore increasing strength, power, speed and endurance.⁸⁰ Student-athletes usually use this drug for this specific reason, to enhance performance.

Student-athletes are facing more mental health challenges than ever before. Many of them suffer from different illnesses including mood disorders, anxiety disorders, eating disorders and substance-related disorders. Coaches and staff must learn how to effectively address these situations and help their student-athletes seek the help that they need.

University of Maryland Counseling Center, Problems, and Initiatives

The University of Maryland's Counseling Center supports the University's mission of fostering education, critical thinking and intellectual growth of its students while also focusing on providing "comprehensive and effective psychological, career, academic, testing, accessibility and disability services to meet the personal, developmental, mental health and educational needs of its diverse student body."⁸¹ The Center does this through consultation, outreach and partnerships with faculty, staff, administrators, parents and other key stakeholders.⁸² All students have access to the

⁷⁹ Ron A. Thompson, et.al., "Managing Student-Athletes' Mental Health Issues", 29.

⁸⁰ Ron A. Thompson, et.al., "Managing Student-Athletes' Mental Health Issues", 29.

⁸¹ "Our Mission," UMD Counseling Center, accessed December 2, 2018, <https://www.counseling.umd.edu/aboutus/mission/>.

⁸² UMD Counseling Center, "Our Mission."

Center including student-athletes, but many may not utilize these services for reasons stated in the previous chapter.

Like many other universities and colleges, the Counseling Center has seen a significant increase in the number of students seeking help. As shown in Figure 13 below, in the 2016-2017 academic year 2,520 students made a counseling service intake appointment, a 24 percent increase from the average of the last three years (See Appendix A).⁸³ The Center has faced challenges in accommodating this increase and has been subject to several protests from students.

Summary of Help-Seeker Contacts			
Division	2016-2017	Prior 3-yr Avg.	Change from 3-yr Avg.
Counseling Service Intake Appointments	2,520	2,032	+24%
Accessibility and Disability Service	1,893	2,201	-14%*
Learning Assistance Service	7,647	6,970	+10%
Total Help Seekers	12,061	12,395	-3%
Test Administrations	10,396	10,475	-.8%
Consultation / Professional Activities	20,529	15,993	+29%

*In 2016-17, ADS implemented an electronic record-keeping system with improved efficiency at determining an exact number of active students using ADS. In prior years, hand-calculated user totals may have included currently registered but non-active students.

Figure 13. Summary of help-seeker contacts (Source: UMD Division for Student Affairs Counseling Center)

The Scholars Promoting and Revitalizing Care (SPARC), a College Park Scholars student organization, focuses on promoting and improving wellness across campus by facilitating active participation and engagement with others.⁸⁴ In February 2018, the organization launched a #30DaysTooLate social media movement to call attention to the

⁸³ "Counseling Center 58th Annual Report, 2016-2017," UMD Division of Student Affairs Counseling Center, accessed December 2, 2018, <https://www.counseling.umd.edu/global/docs/aboutus/annualreport.pdf>, 4.

⁸⁴ "Our Mission and Goal," SPARC, accessed December 2, 2018, <https://umdsparc.com/mission-and-goal/>.

shortcomings of the Counseling Center's resources and to push for change.⁸⁵ SPARC found that students have to wait an average of 30 days to get help from the Center, largely because the Center only has 18 full- or part-time counselors for the whole University of Maryland student body.⁸⁶ After the initial intake appointment, students are also limited to eight individual/couples sessions per year, which means that many students may be denied the help they truly need.⁸⁷ In a University of Maryland Mental Health Care Survey that SPARC conducted, they found that many students are deterred from seeking help because of the availability of appointments at the Center, and many students demand more resources since they are unable to receive help from the Center in a timely manner.⁸⁸

In response to this movement, in April the University of Maryland announced new plans for a number of actions that would address the mental health crisis. Three additional full-time counseling psychologist positions were created to hopefully reduce the wait time for appointments.⁸⁹ Twelve new workshop groups, each composed of four to twelve students would be available for students particularly dealing with anxiety and depression.⁹⁰ The Counseling Center expanded their referral options and added online counseling as a resource.⁹¹ The Center further emphasized that students in crisis can walk

⁸⁵ "#30DaysTooLate," Scholars Promoting and Revitalizing Care (SPARC), accessed December 2, 2018, <https://umdsparc.com/30daystoolate/>.

⁸⁶ "UMD Mental Health Care Survey," SPARC, accessed December 2, 2018, <https://umdsparc.com/mental-health-survey/>.

⁸⁷ SPARC, "UMD Mental Health Care Survey."

⁸⁸ SPARC, "UMD Mental Health Care Survey."

⁸⁹ "Letter to the Campus Regarding Mental Health," UMD Division of Student Affairs Office of the Vice President, last modified April 2, 2018, <https://studentaffairs.umd.edu/news/letter-to-the-campus-community-regarding-mental-health>.

⁹⁰ UMD Division of Student Affairs Office of the Vice President, "Letter to the Campus."

⁹¹ UMD Division of Student Affairs Office of the Vice President, "Letter to the Campus."

in for emergency counseling.⁹² Students who call the Counseling Center after hours will now be redirected to a licensed therapist on call.⁹³ The Center also acknowledged the impact of SPARC and the need for a student group to continually work with the Counseling Center.⁹⁴ Finally, the Center is granted funds from alcohol revenues at sporting events to better provide services and they hope to continue to hire additional staff.⁹⁵ These actions have shown the University of Maryland's commitment to its students and its desire to provide everyone with access to mental health services.

As of this fall, two new staff psychologists were hired and another filled a prior vacancy, while two triage counselors are still to be hired to run a new emergency department-style intake area to improve student access.⁹⁶ The Counseling Center also launched an innovative phone app, called WellTrack, which provides on-the-go coping mechanisms, such as progressive relaxation programs, a virtual zen room and a mood checker.⁹⁷ This app will be useful for students who do not necessarily need to go to the Counseling Center or for anyone who needs tools and strategies to cope with mental illness or stress throughout the day. This easily accessible resource could become a helpful tool for student-athletes who have especially limited time to see counselors or therapists.

While having access to counselors and psychiatrists, among other resources, is essential to students' college experience on campus, the increase of mental health issues among students nationwide calls for a systemic solution of promoting mental well-being

⁹² UMD Division of Student Affairs Office of the Vice President, "Letter to the Campus."

⁹³ UMD Division of Student Affairs Office of the Vice President, "Letter to the Campus."

⁹⁴ UMD Division of Student Affairs Office of the Vice President, "Letter to the Campus."

⁹⁵ UMD Division of Student Affairs Office of the Vice President, "Letter to the Campus."

⁹⁶ Colleen M. Crowley, "On the Well Track," *MarylandToday*, September 11, 2018, <https://today.umd.edu/articles/well-track-461decac-26f9-4483-8d2f-6609a61b029e>.

⁹⁷ Crowley, "On the Well Track."

across campuses in all aspects of students' lives. Creating academic and residential environments where the quality of space and the programs offered within them promote a therapeutic and positive environment can begin to combat the struggles and stressors that every student and student-athlete faces.

CHAPTER 3 | NCAA: Division I Athletics, Rules and Resources

The NCAA is a member-led organization dedicated to the well-being and lifelong success of college athletes across 1,117 colleges and universities and in three divisions (Figure 14).⁹⁸ The organization has seven core values, which encompass a positive collegiate model of athletics, high integrity and sportsmanship, the pursuit of excellence, the role of intercollegiate athletics in the greater educational system, an inclusive culture, respect and presidential leadership at all levels (See Appendix B).⁹⁹ The NCAA's three divisions are based upon like-minded campuses in terms of philosophy, competition and opportunity.¹⁰⁰

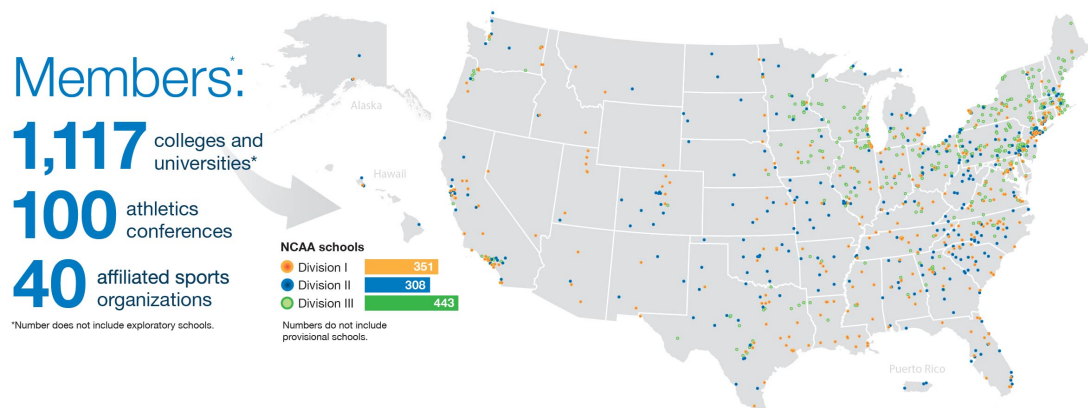


Figure 14. NCAA members (Source: NCAA)

⁹⁸ “What is the NCAA?” NCAA, accessed November 14, 2018, <http://www.ncaa.org/about/resources/media-center/ncaa-101/what-ncaa>.

⁹⁹ “NCAA Core Values,” NCAA, accessed November 14, 2018, <http://www.ncaa.org/about/ncaa-core-values>.

¹⁰⁰ “Our Three Divisions,” NCAA, accessed November 14, 2018, <http://www.ncaa.org/about/resources/media-center/ncaa-101/our-three-divisions>.

Division I

Division I schools typically have the “biggest student bodies, manage the largest athletics budgets and offer the most generous number of scholarships.”¹⁰¹ There are nearly 350 Division I colleges and universities, with more than 6,000 athletic teams and more than 170,000 student-athletes.¹⁰² These schools commit to “maintaining a high academic standard for student-athletes in addition to a wide range of opportunities for athletics participation.”¹⁰³ The University of Maryland is a Division I school and is a member of the Big Ten Conference. Other Division I Big Ten schools include Pennsylvania State University, University of Michigan, Ohio State University, University of Wisconsin, University of Iowa, Indiana University, Michigan State University, University of Minnesota, University of Nebraska, University of Illinois, Northwestern University, Purdue University and Rutgers University.

Student-Athlete Housing Rules and Effects

In August 1996, the NCAA adopted a Division I general rule that addresses how student-athletes are housed on campus (See Appendix C).¹⁰⁴ Student-athletes must be assigned to housing in the same way as the general student body and cannot be housed in athletic dormitories, which are defined as institutional dormitories in which at least 50

¹⁰¹ “NCAA Division I,” NCAA, accessed November 14, 2018, <http://www.ncaa.org/about?division=d1>.

¹⁰² NCAA, “NCAA Division I.”

¹⁰³ NCAA, “NCAA Division I.”

¹⁰⁴ National Collegiate Athletic Association (NCAA), “Division I Legislation: 16.5 Housing and Meals,” Legislative Services Database, accessed November 14, 2018, <https://web3.ncaa.org/lstdbi/search/bylawView?id=1259#result>.

percent of the residents are student-athletes.¹⁰⁵ In addition to athletic dormitories, housing student-athletes in athletic blocks was also banned in 2001.¹⁰⁶

This thesis proposal focuses on this idea of fully integrating the student-athlete with the non-athlete. Following this rule allows the general student body to also have access to on-campus housing that supports their mental and physical well-being. Creating housing that is open to all students, despite the focus on student-athletes in this situation, allows it to work as a deployable model for any campus if a more supportive and therapeutic housing environment is desired.

Mental Health Resources and Best Practices

The NCAA created the NCAA Sport Science Institute (SSI) to become a leader in “providing health and safety resources to college athletes, coaches, athletic administrators and campus partners.”¹⁰⁷ These resources are available to member schools and all involved parties so that they can better “promote and support the health and well-being of student-athletes.”¹⁰⁸ Resources include interactive educational modules, workshop planning kits, informational and data-driven booklets and fact sheets and more.

In November 2013, the NCAA brought together a multidisciplinary task force to address the mental health issues and challenges that student-athletes face today.¹⁰⁹ Out of that group came two documents, *Mind, Body and Sport: Understanding and Supporting*

¹⁰⁵ NCAA, “Division 1 Legislation.”

¹⁰⁶ NCAA, “Division 1 Legislation.”

¹⁰⁷ “Mental Health Educational Resources,” NCAA, accessed November 14, 2018, <http://www.ncaa.org/sport-science-institute/mental-health-educational-resources>.

¹⁰⁸ NCAA, “Mental Health Educational Resources.”

¹⁰⁹ NCAA Sport Science Institute, “Mental Health Best Practices: Understanding and Supporting Student-Athlete Mental Wellness,” Interassociation Consensus Document, revised 2017, accessed November 14, 2018, http://www.ncaa.org/sites/default/files/SSI_MentalHealthBestPractices_Web_20170921.pdf, 1.

*Student-Athlete Mental Wellness*¹¹⁰ and “Mental Health Best Practices: Understanding and Supporting Student-Athlete Mental Wellness,” both of which have been distributed to every NCAA member institution as a way to better educate and train coaches, staff, administrators and others. The latter document lays out four best practices in better understanding and supporting student-athletes on their college campuses:¹¹¹

1. Clinical Licensure of Practitioners Providing Mental Health Care
2. Procedures for Identification and Referral of Student-Athletes to Qualified Practitioners
3. Pre-Participation Mental Health Screening
4. Health-Promoting Environments that Support Mental Well-Being and Resilience

The fourth practice listed above aims to create athletic environments that truly support student-athletes through “normalizing care seeking and fostering experiences and interactions that promote personal growth, self-acceptance, autonomy and positive relations with others.”¹¹²

The design proposal for this thesis further explores this fourth practice by proposing a literal physical environment that supports the mental well-being of both the student-athlete and general student body users. Interactions and relationships that take place in the athletic environment (i.e. in athletic complexes, locker rooms, practice fields, competition) can be expanded upon and continue to grow in this proposed secondary environment. This housing environment also provides a 24-7 space outside of athletics to

¹¹⁰ *Mind, Body and Sport: Understanding and Supporting Student-Athlete Mental Wellness*, ed. Gary Brown (Indianapolis, IN: NCAA, 2014).

¹¹¹ NCAA Sport Science Institute, “Mental Health Best Practices,” 4.

¹¹² NCAA Sport Science Institute, “Mental Health Best Practices,” 12.

explore other issues and stress in a student-athlete's life or to address athletic concerns in an unbiased context.

CHAPTER 4 | Humans, Space and How Environment Influences Healing

“Health, in the broad sense of well-being, is not a concept confined to the medical world but is related to the encompassing environment in which the entire cycle of human life unfolds. This is also true of architecture. In the original sense, architecture was always more than functional construction; it included the aesthetic and symbolic dimensions representing the specifically human world of social and cultural meaning.” – Healing Architecture¹¹³

In order to create a therapeutic environment that supports and encourages the physical and mental well-being of the student-athletes and other students that become the users of this housing design, an understanding of how space generally influences humans is critical. Space can influence how the brain perceives reality, while the body, soul and spirit of a person react to the surrounding context in both positive and negative ways. Understanding these responses and processes can lead to design principles that can guide the built environment towards healing and promoting health.

The Power of Space

The self is experienced in space and time and is assembled from a number of different brain modules, or domains, that constantly need to search, to be curious, to make enquiries and to seek answers.¹¹⁴ The brain perceives the outside world and

¹¹³ Christine Nickl-Weller and Hans Nickl, *Healing Architecture* (Munich: Braun Publishing, 2013), 254.

¹¹⁴ Nickl-Weller and Nickl, *Healing Architecture*, 240.

constructs reality by breaking down objects into components and then reassembling them according to the brain's own laws. For example, an object is broken down into its shape, motion and color and then reassembled, so “whether the brain is able to shape its inner world to such an advantage that seeking and fulfillment are in balance depends on the impulses that the brain is offered.”¹¹⁵ Therefore the environments around us are essential in satisfying these different needs, and environments that are designed to satisfy all basic needs and also appeal aesthetically will produce a feeling of well-being (Figure 15).¹¹⁶

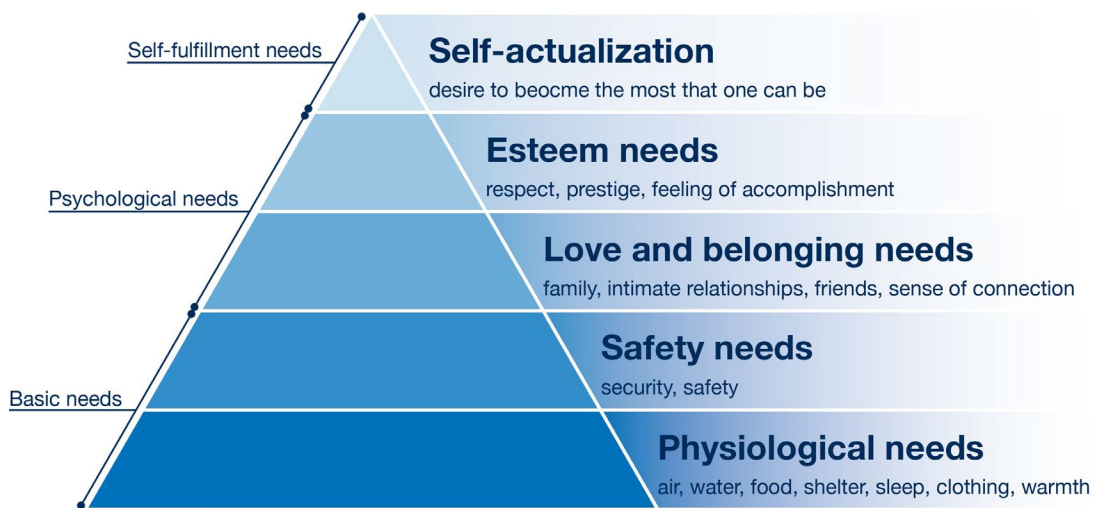


Figure 15. Maslow's hierarchy of needs (Source: Author, Abraham Maslow)

Understanding the importance of space is critical in developing architectural approaches that capitalize on the healing power of space. Initially, the purpose of a space is to facilitate the pure sense of being by providing for basic needs.¹¹⁷ It then might become more complex if it is required to be a certain way, depending on age, gender, social endowment, time of use and special wishes.¹¹⁸ Because explorative behavior is a

¹¹⁵ Nickl-Weller and Nickl, *Healing Architecture*, 241.

¹¹⁶ Nickl-Weller and Nickl, *Healing Architecture*, 240-241.

¹¹⁷ Nickl-Weller and Nickl, *Healing Architecture*, 243.

¹¹⁸ Nickl-Weller and Nickl, *Healing Architecture*, 243.

basic prerequisite of mental life, spaces must also address basic mental needs, which means creating spaces that are not boring, monotonous or allow for quick experience and understanding.¹¹⁹ In contrast, life is shaped by recognition and habit, so spaces may even need to satisfy varying or competing needs.¹²⁰ Humans are not meant to live alone, so spaces need to allow for different encounters in different types of interpersonal interactions.¹²¹ For example, public space should “demonstrate a protective function, while at the same time providing the opportunity for an open encounter without restriction or limitation.”¹²² Creating unique spaces that are stimulating yet understandable is an important step in promoting mental well-being.

Humans draw on general internal resources in order to preserve their health, a process called salutogenesis.¹²³ Salutogenesis is affected by space because the coherence between the inner needs of an individual and the external world lead to a promotion of health.¹²⁴ Religious spaces become a basis for self-affirmation and correspond to personal memories of an individual.¹²⁵ Private spaces are necessary for people to be alone with themselves, away from the gazes of others, but this private sphere should also be broken up at some point to allow for the possible nearness of others.¹²⁶ Hospital spaces are meant to improve and regenerate health, but the focus on functionality often denies individuals the varying spaces they need to satisfy their distinct basic and mental needs.¹²⁷

¹¹⁹ Nickl-Weller and Nickl, *Healing Architecture*, 243.

¹²⁰ Nickl-Weller and Nickl, *Healing Architecture*, 243.

¹²¹ Nickl-Weller and Nickl, *Healing Architecture*, 243.

¹²² Nickl-Weller and Nickl, *Healing Architecture*, 243.

¹²³ Nickl-Weller and Nickl, *Healing Architecture*, 245.

¹²⁴ Nickl-Weller and Nickl, *Healing Architecture*, 245.

¹²⁵ Nickl-Weller and Nickl, *Healing Architecture*, 245.

¹²⁶ Nickl-Weller and Nickl, *Healing Architecture*, 245-247.

¹²⁷ Nickl-Weller and Nickl, *Healing Architecture*, 247.

Understanding how the brain perceives spaces, how spaces can affect perception, and how both contribute to promoting health is necessary to develop design approaches that encourage healing in a non-clinical way. Being able to draw and reflect on one's own internal strength is a necessary element of recuperation and space is a meaningful part of this.¹²⁸

Multi-level Influences of Environment

Form and space can greatly influence a person or community and nourish or spur development, both socially and individually, because all aspects of our environment work on us through our senses, on all levels of our being and at three levels of social scale: personal, cultural and universal.¹²⁹ The qualities of a space and their integrity also affect us in either positive or negative ways.

Spaces that a person likes or prefers is personal, even though physiological reactions to qualities such as color, noise level, air quality or temperature are common to everyone.¹³⁰ Psychological responses however are more individualized or culturally conditioned.¹³¹ In general, blue and green create calmness while red, orange and yellow enliven, but each hue and quality have an highly individualized effect or preference.¹³² Noise can directly produce physiological stress, but many of its effects are mainly psychological.¹³³ People perceive noise as either pleasantly enriching the place they are in or undesired and invading their territory.¹³⁴ The question then becomes, how can we

¹²⁸ Nickl-Weller and Nickl, *Healing Architecture*, 250.

¹²⁹ Christopher Day, *Spirit & Place* (Oxford: Architectural Press, 2002), 111.

¹³⁰ Day, *Spirit & Place*, 111.

¹³¹ Day, *Spirit & Place*, 111.

¹³² Day, *Spirit & Place*, 111.

¹³³ Day, *Spirit & Place*, 112.

¹³⁴ Day, *Spirit & Place*, 112.

design spaces to fulfill the soul's needs in ways that transcend individually subjective differences?¹³⁵

Spaces or forms can have strong cultural associations both individually and as a group. For example, thatch cottages remind the English of a pastoral golden age, while to the Irish, they are a reminder of extreme poverty.¹³⁶ It is often very difficult to overcome these cultural associations because they have become embedded into one's soul in either a positive or negative way.

Universally, places that look, feel and sound hard or soft often affect how people think, feel and behave.¹³⁷ Hard, firm and angular spaces or forms emulate intellectual clarity and can either yield austere tranquility or unapproachable repulsion.¹³⁸ Soft and yielding spaces seem sensuous and can range from feeling welcoming to oppressively enwrapping.¹³⁹ While ascetic surroundings can support the inner life, personal touches of outer life can make spaces feel homely and lived in.¹⁴⁰ Obsessively clean and tidy spaces and excessively cluttered spaces can suffocate the body and soul, therefore most people are comfortable living somewhere between these extremes.¹⁴¹

The integrity or truthfulness of a place can affect how we respond to it. The more people can see a place for what it truly is, the more they feel they can trust it. This can apply to the form and materials of a space, which determine how 'real' it feels. Materials from nature manifest integrated sensory messages and convey a more legible and visible

¹³⁵ Day, *Spirit & Place*, 112.

¹³⁶ Day, *Spirit & Place*, 112.

¹³⁷ Day, *Spirit & Place*, 112.

¹³⁸ Day, *Spirit & Place*, 112.

¹³⁹ Day, *Spirit & Place*, 112.

¹⁴⁰ Day, *Spirit & Place*, 112.

¹⁴¹ Day, *Spirit & Place*, 112.

meaning of what they are.¹⁴² Wood and cotton are more inviting than plastic and steel, and manufactured materials that imitate natural ones only approximately feel like them.¹⁴³ Truth is fundamental to human health since “we can only make sense of our personal development, surroundings, society, if they have an underlying structure of intelligibility – if things are what they appear to be.”¹⁴⁴ While places have an affect on us, we also have an affect on place. Damaging the environment damages us, while healing and caring for it nourishes and even heals us.¹⁴⁵

Psychological and physiological reactions work upon each other while individual, cultural and universal responses seem to mix together.¹⁴⁶ While personal preferences are easily recognizable and cultural ones occasionally recognized, universal ones are least conscious but the most powerful since they are shared with all of humanity.¹⁴⁷ This should encourage designers to create spaces that elicit responses on a deeper level than just personal preferences so that every individual can positively respond to a space. Architects can influence the spirit of a place so that it in turn affects the body, soul and spirit of every individual.

Environment, Health and Healing

Health involves processes, functions, psychological state and bodily structure in different physical, life-energy, state-of-soul and fulfillment dimensions.¹⁴⁸ It is a state of

¹⁴² Day, *Spirit & Place*, 119.

¹⁴³ Day, *Spirit & Place*, 119.

¹⁴⁴ Day, *Spirit & Place*, 119.

¹⁴⁵ Day, *Spirit & Place*, 119.

¹⁴⁶ Day, *Spirit & Place*, 112-113.

¹⁴⁷ Day, *Spirit & Place*, 113.

¹⁴⁸ Day, *Spirit & Place*, 181.

renewal, balance and development.¹⁴⁹ Sickness, on the other hand, emerges from disposition, stress or an agent.¹⁵⁰ Buildings can adversely affect health in a physical way (i.e. sick building syndrome, pathogen-breeding air-conditioning, etc.), but they can also be health-giving.¹⁵¹ This is because inspiration, motivation, meaning and fulfillment are just as crucial to human health as nutrition and hygiene.¹⁵² Humans have physical bodies, life energies, feeling souls and unique individual spirits, and the environment works upon each level differently.¹⁵³ Having a balance at all four levels is crucial in creating a built environment that positively reinforces these aspects of every individual.

Physical qualities of buildings could include ergonomic design, impact absorption and electromagnetic avoidance.¹⁵⁴ Materials of a building should not emit air-born toxins, but if they do, plants, water and ex-living materials like wood, lime, peak and silk should be used to absorb them.¹⁵⁵ Building aspects that address our physical bodies have generally been incorporated into design. Architects understand how people move through space and how different building systems can affect health and bodily function.

Life energies can remain in balance through contact with cycles of nature such as seasonal and diurnal rhythms of light, activity, sounds and scents.¹⁵⁶ Design principles that allow for more freedom of movement and fluidity include angling walls so that entries, routes and sitting positions avoid confronting wall planes; swelling corridors to differentiate stopping places from routes, with plants and water features; inseting

¹⁴⁹ Day, *Spirit & Place*, 181.

¹⁵⁰ Day, *Spirit & Place*, 181.

¹⁵¹ Day, *Spirit & Place*, 182.

¹⁵² Day, *Spirit & Place*, 182.

¹⁵³ Day, *Spirit & Place*, 183.

¹⁵⁴ Day, *Spirit & Place*, 183.

¹⁵⁵ Day, *Spirit & Place*, 1823.

¹⁵⁶ Day, *Spirit & Place*, 184.

doorways so that each room or room group is something special; frequent openings to the outer world, to gardens, and foliage brushed balconies; interweaving daylight from different directions; softer, diffuse and varied artificial light; and meaningful variety in materials, especially flooring, ceiling heights and door, window and ceiling gestures.¹⁵⁷ These qualities of energizing surroundings can therefore resonate in our souls.¹⁵⁸

Being able to de-stress is necessary for balance in health, therefore feelings, which respond to senses, are influenced by the environment.¹⁵⁹ Color, light, sound and smell all greatly affect mood and can be used to calm senses and feelings and finally, to release stress.¹⁶⁰ This also means that rooms and their specific functions must be designed to feel the same way they are to influence the senses.¹⁶¹ Environments that incorporate nature and landscape can have a huge therapeutic effect. Studies show that surgical patients in window-less hospital units developed post-operative delirium twice as much as those with a window.¹⁶² Those patients with a view of trees and flowers took nine percent less time to recover than those without the view.¹⁶³ Nature is therefore a powerful stress reliever and is becoming more and more incorporated into the built environment. Because life can be overwhelming at times, we need surroundings that can “de-stress, renew, re-integrate and enliven us – especially places of tranquility, delight, human-vitality and social warmth.”¹⁶⁴ Our environments must therefore include a calm haven and a warm sociable heart.¹⁶⁵

¹⁵⁷ Day, *Spirit & Place*, 231.

¹⁵⁸ Day, *Spirit & Place*, 232.

¹⁵⁹ Day, *Spirit & Place*, 184.

¹⁶⁰ Day, *Spirit & Place*, 184.

¹⁶¹ Day, *Spirit & Place*, 184.

¹⁶² Day, *Spirit & Place*, 233.

¹⁶³ Day, *Spirit & Place*, 233.

¹⁶⁴ Day, *Spirit & Place*, 233.

¹⁶⁵ Day, *Spirit & Place*, 233.

As one moves between rooms and thus between states, activities or places, one experiences both an outer physical journey and an inner spirit-preparatory one.¹⁶⁶

Therefore the quality of outdoor paths, bridges, archways, gates and steps as well as indoor passages, doorways, turns and changes in view, texture, space, light and sound can affect the journey and the inner experience.¹⁶⁷

While the physical sphere has been the main focus for developing the environments around us, it is crucial to design for the nourishment of all four levels. Understanding how physical bodies react to spatial qualities; how life-enhancing qualities support life energies; how color, harmony and multi-sensory delight affect feelings; and how journey experiences can affect the spirit are all important factors in nurturing the whole human being and encouraging healing.¹⁶⁸ Healing environments are not just for those who are ill. They are also for the healthy and are necessary to make the most of living, being, thinking, feeling and doing.¹⁶⁹

People inhabit and react to spaces and environments in a variety of ways. Therefore it is paramount that architects intentionally design the details, qualities, forms and experiences of the built environment so that it can promote health and well-being, both physically and mentally. These principles will contribute to the design of this housing proposal so that student-athletes and other students can call a therapeutic and life-giving environment their home.

¹⁶⁶ Day, *Spirit & Place*, 184.

¹⁶⁷ Day, *Spirit & Place*, 184.

¹⁶⁸ Day, *Spirit & Place*, 187.

¹⁶⁹ Day, *Spirit & Place*, 229.

CHAPTER 5 | Precedents

In researching architectural precedents for this proposal, both program-driven and typological examples were analyzed, including student-athlete housing, non-clinical healing environments and community living. Student-athlete housing, whether successful or unsuccessful, show how residential units and other program-driven spaces can be arranged in respect to combining student-athletes and non-athletes in a community. Non-clinical healing environments provide a typological framework of how the arrangement, aesthetics and quality of an environment can promote healing. Typological examples of communities living together provide another look at how residential units and other programs can become a cohesive environment.

Student-Athlete Housing

Several colleges and universities have started to build on-campus student-athlete housing as a way to persuade high school seniors or transfers to join their athletic teams. Although these precedents follow the NCAA's housing rule, limiting the number of student-athletes that are housed in these residence halls, some of them seem to toe the line of what is special treatment and what is a high quality of living for all users, regardless of whether they are an athlete or not.

STUDIOARCHITECTURE¹⁷⁰ and Newman Architects built Headington Hall, a student-athlete residence hall at the University of Oklahoma in 2013 (Figure 16).¹⁷¹ It houses 384 freshmen and sophomore student-athletes and non-athletes and several faculty-in-residence in three types of suites organized into male and female wings (Figure 17).¹⁷² Only 49 percent of residents in Headington Hall are student-athletes, but it isn't clear whether whole athletic teams are housed here or if it's a random mix of student-athletes. The residence hall has many amenity and communal spaces including a dining facility, game room, theater room, media room, cardiovascular room, commons area, retail spaces and an academic commons with seminar rooms, reading rooms, private study rooms, an academic lounge and a technology center.¹⁷³

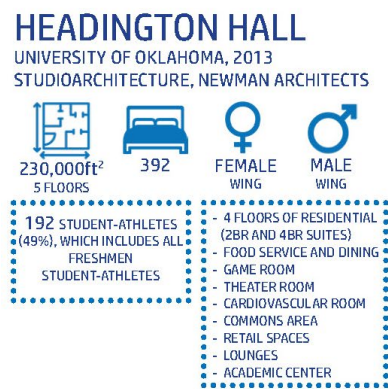


Figure 16. Headington Hall (Source: Author, **STUDIOARCHITECTURE**)

¹⁷⁰ "Headington Hall," **STUDIOARCHITECTURE**, accessed October 17, 2018, <https://studioarc.com/projects/headington-hall/>.

¹⁷¹ "Headington Hall," Newman Architects, accessed October 17, 2018, <https://www.newmanarchitects.com/headington-hall/>.

¹⁷² "Headington Hall – Welcome," University of Oklahoma, accessed October 17, 2018, <https://www.chicagomanualofstyle.org/turabian/turabian-notes-and-bibliography-citation-quick-guide.html>.

¹⁷³ "Headington Hall – Amenities," University of Oklahoma, accessed October 17, 2018, http://www.soonersports.com/ViewArticle.dbml?&DB_OEM_ID=31000&ATCLID=208803931.

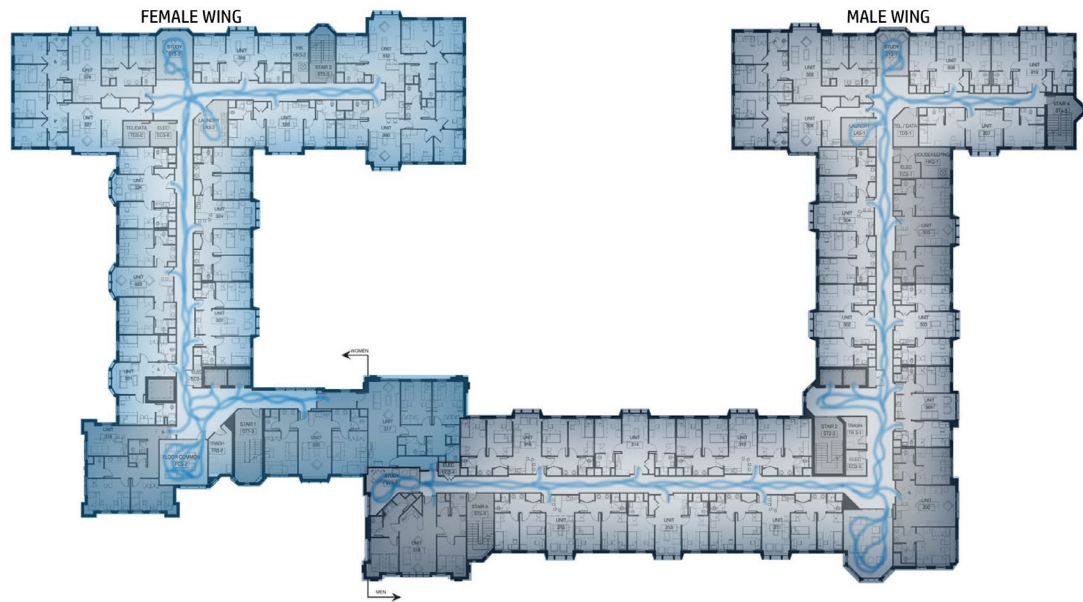


Figure 17. Amount of interactions between people in Headington Hall's split wings (Source: Author)

Although student-athlete housing is the closest type of architectural space to the proposal of this thesis, existing examples of it fail to give an innovative approach to housing students with respect to all areas of their lives, both physically and mentally. These residence halls provide living space for student-athletes and non-athletes alike, but the amenity spaces and quality of the environment do not aid in specifically encouraging well-being or strong community.

Other student-athlete housing precedents include:

- McCarthy Hall, University of Kansas (2014, Treanor Architects)
- South Donahue Hall, Auburn University (2013, Goodwyn Mill Cawood)
- Wildcat Coal Lodge, University of Kentucky (2012, JRA Architects)
- Billy Manardi Hall, University of Louisville (2003, Lockett & Farley Architects)
- Case Commons, North Carolina State (2017 Proposal – Cancelled)

Non-Clinical Healing Environments

Non-clinical healing environments include buildings specifically designed for the everyday use of people who are physically ill. While they may not house patients overnight like hospitals, these spaces are meant to be therapeutic and comforting in what can be a long journey of recovery. The highly intentional design and quality of interior spaces, qualities, materials and outdoor spaces can create an environment that promotes healing in a non-clinical way.

The Healthcare Center for Cancer Patients, built in 2011 by NORD Architects in Copenhagen, Denmark, creates an environment that is more like a home and less like a hospital (Figure 18).¹⁷⁴ NORD Architects found that “research shows that architecture in itself can be healing and have a positive influence on peoples’ recovery,” and they worked to create spaces that maintained a human scale and were comforting and homey.¹⁷⁵ The Center consists of a series of smaller houses connected by a raised folded roof. The inner courtyard provides space for silence and meditation while the surrounding rooms allow for patient groups, psychologists, families and advice groups to meet and just be with one another. There are also kitchens, training rooms and climbing spaces to allow patients to remain active and healthy during their recovery. The Center is well-lit with large windows both at the ground and clerestory level, and the simple and natural materials used create a comfortable and relaxing environment (Figure 19).

¹⁷⁴ “Cancer Centre,” NORD Architects, accessed October 17, 2018, <https://www.nordarchitects.dk/cancercentre>.

¹⁷⁵ NORD Architects, “Cancer Centre.”

HEALTHCARE CENTER FOR CANCER PATIENTS

COPENHAGEN, DENMARK, 2011
NORD ARCHITECTS



~19,400ft²
(1,800m²)

- SEVERAL SMALL HOUSES
COMBINED INTO ONE
- LOUNGE
- COURTYARD FOR CONTEMPLATION
- SPACES FOR EXERCISES
- COMMON KITCHEN
- MEETING ROOMS



Figure 18. Healthcare Center for Cancer Patients (Source: Author, Adam Mørk)



Figure 19. Healthcare Center materials and spatial qualities (Source: Author, Adam Mørk)

The Livsrums Cancer Counseling Center, built in 2013 by EFFEKT in Næstved, Denmark, similarly creates a human-scale and comforting environment for cancer patients to recover (Figure 20).¹⁷⁶ The building consists of seven small interlocking

¹⁷⁶ “Livsrums Cancer Counseling Center,” EFFEKT, accessed October 17, 2018, <https://www.effekt.dk/liv>.

houses wrapped around two central courtyards.¹⁷⁷ The courtyards promote silence and meditation and also physical activity and social interaction.¹⁷⁸ The different programs and functions of each house create a coherent sequence of spaces that include a library, kitchen, conversation rooms, lounge, workshop, gym and wellness area.¹⁷⁹ This residential-scale redesign of the standard hospital environment “focuses on the beneficial qualities of light, open spaces, privacy and views of and access to outdoors” (Figure 21).¹⁸⁰ The Livsrum Centers are inspired by Maggie’s Centers which base the design of spaces on the belief that “the architectural design in terms of daylight quality, the room’s mood, color, sound and the ability to be private and secure [can] support the healing that takes place both physically and psychologically.”¹⁸¹



Figure 20. Livsrum Cancer Counseling Center (Source: Author, EFFEKT)

¹⁷⁷ EFFEKT, “Livsrum Cancer Counseling Center.”

¹⁷⁸ EFFEKT, “Livsrum Cancer Counseling Center.”

¹⁷⁹ EFFEKT, “Livsrum Cancer Counseling Center.”

¹⁸⁰ Alison Furuto, “Cancer Counseling Center Proposal / EFFEKT,” ArchDaily, last modified March 25, 2012, accessed October 17, 2018, <https://www.archdaily.com/218702/cancer-counseling-center-proposal-effekt>.

¹⁸¹ Furuto, “Cancer Counseling Center Proposal / EFFEKT.”



Figure 21. Livsrum Cancer Counseling Center materials and spatial qualities (Source: Author, Quintin Lake and Thomas Ibsen)

Even though these precedents have generally been designed for people who are terminally ill, the same design principles can be applied to mentally ill or physically exhausted students and student-athletes. Many of the rooms within these precedents have a therapeutic function of healing or of promoting well-being, both of which haven't been seen in many other types of architecture, especially student housing.

Other non-clinical healing environment precedents include:

- Livsrum, Vejle, Denmark (2013, ARCGENCY)
- Livsrum, Herning, Denmark (2014, Claus Pryds Architects)
- Livsrum, Roskilde, Denmark (2014, ADEPT)
- Livsrum, Odense, Denmark (2013, Frier Architecture)
- Livsrum, Aalborg, Denmark (2013, POLYFORM now Sangberg Architects)
- Livsrum, Herlev, Denmark (Ongoing, Cornelius Vöge)

- Numerous Maggie's Centres across the United Kingdom and Scotland
- Ballarat Community Health Primary Care Centre, Lucus VIC, Australia (2014, DesignInc)

Community Living

“Community living” can mean a single building housing a community or several buildings housing a possibly larger community. In these examples, a community can either be a group of similar people who might only moderately interact with one another or a group of people who depend upon one another for everyday living. Certain spaces or programming within these environments may be unique to that community and not applicable elsewhere, but the way they are woven into the whole can create a more cohesive and successful community environment.

The Vejle Psychiatric Hospital, built in 2017 by Arkitema Architects in Vejle, Denmark, creates a larger scale version of the Livrsum project discussed above (Figure 22). It consists of eight wings that extend out from a closed-loop circulation core (Figure 23).¹⁸² These wings create centralized courtyards while also allowing the landscape to flow into the in-between spaces of each wing. In addition to the 91 beds, children's ambulatory, psychiatric emergency room (ER) and electroconvulsive therapy (ECT), the hospital's design focuses on creating the best possible surroundings for the patients and employees through “ample light throughout the building, easy access to nature and outdoor spaces, transparent wards with easy overviews and a well thought layout.”¹⁸³

¹⁸² “Vejle Psychiatric Hospital,” Arkitema Architects, accessed October 17, 2018, <https://arkitema.com/da/arkitektur/sundhed/psykiatrisygehus-i-vejle>.

¹⁸³ “Vejle Psychiatric Hospital / Arkitema Architects,” ArchDaily, accessed October 17, 2018, <https://www.archdaily.com/901732/vejle-psychiatric-hospital-arkitema-architects>.

These design principles work together to promote a heavily therapeutic environment, necessary for both patients and employees to strive for and maintain good health.

VEJLE PSYCHIATRIC HOSPITAL

VEJLE, DENMARK, 2017
ARKITEMA ARCHITECTS

~183,000ft²
(17,000m²)



91

- EIGHT CLUSTER HOUSES
- CONNECTED BY CIRCULATION
- CORE; ALLOW NATURE TO SLIP
- IN
- CHILDREN'S AMBULATORY
- PSYCHIATRIC EMERGENCY ROOM
- LOUNGES
- MEETING ROOMS
- BASKETBALL COURT
- COURTYARD AND RECREATIONAL SPACES



Figure 22. Vejle Psychiatric Hospital (Source: Author, Niels Nygaard)



Figure 23. Extending wards that maximize exposure to nature (Source: Author)

The Tautra Monastery, built in 2004 by Jensen & Skodvin Architects in Tautra, Norway, houses 18 nuns and provides all the necessary functional spaces for living (Figure 24).¹⁸⁴ The monastery consists of a system of different sized rooms that are connected in the corners, reducing the amount of corridor space needed and creating seven garden courts within them (Figure 25).¹⁸⁵ Room functions include a church, cloister, chapter room, offices, library, kitchen, bedrooms, production room, and spaces for reflection and reading scripture. Since the main layout of the monastery is horizontal, the daylighting of every space was important.¹⁸⁶



Figure 24. Tautra Monastery (Source: Author, Jensen & Skodvin Architects)

¹⁸⁴ “Tautra Monastery,” Jensen & Skodvin Architects, accessed October 17, 2018, <https://jsa.no/TAUTRA-MARIAKLOSTER-A-Cistercian-nuns-monastery>.

¹⁸⁵ Jensen & Skodvin Architects, “Tautra Monastery.”

¹⁸⁶ Jensen & Skodvin Architects, “Tautra Monastery.”



Figure 25. Continuous access to seven centralized courtyards (Source: Author)

These examples of cohesive communities of people who rely upon one another, display important organization and design principles that can be applied to the proposal of this thesis. These precedents include many different programs of spaces intertwined together to make a complete environment of living.

Other community living precedents include:

- 2012 Olympic Athletes Village, London (2012, 47+ architects)
- Tietgen Dormitory, Copenhagen, Denmark (2005, Lundgaard & Tranberg Architects)
- Sluseholmen, Sluseholmen, Copenhagen (2008, Arkitema Architects and Sjoerd Soeters)
- Stubkaj, Copenhagen, Denmark (2017 – Proposal, WERK Architecture)
- Konrad Veix Stieg, Hamburg, Germany (2017 – Competition, WERK Architecture)

These different precedents provide a wide foundation of design principles when it comes to organization, function, aesthetics, materials, qualities and more. While student-athlete housing hasn't given much inspiration to creating spaces that can promote well-being through a therapeutic environment and address the very specific needs of student-athletes, non-clinical healing environments and other types of community living can begin to fill in the gaps.

CHAPTER 6 | University of Maryland, Site Selection and Analysis

The University of Maryland (UMD or the University) in College Park, Maryland, was originally founded in 1856 as the Maryland Agricultural College, and in 1865 it was designated as the land-grant institution for the state.¹⁸⁷ The state took full control of the college and renamed it the Maryland State College of Agriculture in 1916 and again in 1920 as the University of Maryland.¹⁸⁸ UMD has become a national leader in research and academics and seeks to provide excellent teaching, research and service.¹⁸⁹

Current Culture of Athletics

Intercollegiate athletic competition began at the University of Maryland in 1869.¹⁹⁰ Since then UMD has been a part of the NCAA Division I Southern Conference (1921-1951), the Atlantic Coast Conference (1952-2013), and now the Big Ten Conference (2014-Present).¹⁹¹ There are a total of 19 men's and women's athletic teams in a range of sports including football, basketball, baseball, softball, soccer, lacrosse, field hockey, golf, track and field, cross country, wrestling, gymnastics, volleyball and tennis.

The summer of 2018 and the following 2018-2019 academic year at UMD has been one of tragedy and subsequent allegations of abuse between football coaches and the players. On May 29, 2018, Jordan McNair, a 19-year-old offensive lineman, suffered

¹⁸⁷ "Timeline," UMD, accessed December 1, 2018, <https://www.umd.edu/history-and-mission/timeline>.

¹⁸⁸ UMD, "Timeline."

¹⁸⁹ "History and Mission," University of Maryland (UMD), accessed December 1, 2018, <https://www.umd.edu/history-and-mission>.

¹⁹⁰ UMD, "Timeline."

¹⁹¹ UMD, "Timeline."

a heat stroke during a conditioning session (See Appendix D).¹⁹² He never recovered and died on June 13, 2018. The University has since acknowledged that the athletic and medical staff failed to properly diagnose or treat McNair after exhibiting symptoms of exhaustion and heatstroke.¹⁹³ In September, a 74-page report was published based on an external investigation into McNair's death and the mistakes made by the athletic and medical staff.¹⁹⁴

A couple months after McNair's death, a shocking and devastating ESPN article further rocked the UMD community, claiming a toxic coaching culture in football. The article referenced many interviews with current players, people close to the football program, former players, and former football staffers and specifically called out head coach DJ Durkin and strength and conditioning coach Rick Court in allegedly being abusive and creating an environment based on fear and intimidation.¹⁹⁵ Soon after the publication of the ESPN article, Court resigned and Durkin was placed on administrative leave. In reaction to this loaded article, a 192-page report based on another external investigation was published in October, finding that the "Maryland football team did not have a 'toxic culture,' but it did have a culture where problems festered because too many

¹⁹² Rick Maese and Roman Stubbs, "U-Md. releases report on Jordan McNair, laying out timeline that led to player's death," *Washington Post*, September 21, 2018, https://www.washingtonpost.com/sports/colleges/u-md-board-of-regents-releases-report-on-jordan-mcnair-laying-out-timeline-that-led-to-players-death/2018/09/21/49331ea0-bda9-11e8-b7d2-0773aa1e33da_story.html?utm_term=.c0c52e1a09f9.

¹⁹³ Maese and Stubbs, "U-Md. releases report on Jordan McNair."

¹⁹⁴ "An Independent Evaluation of Procedures and Protocols Related to the June 2018 death of a University of Maryland Football Student-athlete," Walters Inc. – Consultant in Sports Medicine, last modified September 21, 2018, <https://assets.documentcloud.org/documents/4918313/Investigation-in-death-of-Maryland-football.pdf>.

¹⁹⁵ Heather Dinich, Adam Rittenberg, and Tom VanHaaren, "The inside story of a toxic culture at Maryland football," *ESPN*, August 10, 2018, http://www.espn.com/college-football/story/_/id/24342005/maryland-terrapins-football-culture-toxic-coach-dj-durkin.

players feared speaking out.”¹⁹⁶ While the report confirmed that Court, “on too many occasions, acted in a manner inconsistent with the University’s values and basic principles of respect for others,” there were mixed opinions on Durkin and his coaching style.¹⁹⁷ Many players felt that Durkin’s coaching style was similar to those of other big time football programs but that he still expressed generosity and commitment to the players.¹⁹⁸ However, others complained about intensity and length of practices and workouts and other ‘tough love’ tactics.¹⁹⁹ After receiving the report, the president of UMD, Wallace Loh, announced his plans to retire at the end of the academic year largely because of disagreement with the Board of Regent’s decision of reinstating Durkin.²⁰⁰ Only one day later, and after receiving backlash from many UMD organizations, both faculty and student-led, Loh decided it was necessary for the University to part ways with Durkin.²⁰¹

As a result of these investigations, the University launched a new online platform that allows student-athletes to share any comments or concerns they may have.²⁰² The tool, called Terps ICA Feedback, allows student-athletes to send secure messages via a Google Form detailing any issue they have and gives them a choice of being contacted by

¹⁹⁶ Frederick Azar, Bonnie Bernstein, Hon. Robert Ehrlich, Jr., Hon. Benson Legg, Hon. C. McMillen, Charles Scheeler, Hon. Alexander Williams, Jr., and Douglas Williams, “Report to the University System of Maryland of an Independent Investigation of the University of Maryland Football Program,” October 23, 2018, <https://www.usmd.edu/newsroom/Report-to-USM-Independent-Investigation-UMD-Footbal-10-23-2018.pdf>, 11.

¹⁹⁷ Azar et. al., “Report to the University System of Maryland,” 7.

¹⁹⁸ Azar et. al., “Report to the University System of Maryland,” 12.

¹⁹⁹ Azar et. al., “Report to the University System of Maryland,” 12-13.

²⁰⁰ “The Commission Report and the Path Forward,” UMD, Office of the President, Communications, last modified October 30, 2018, <https://president.umd.edu/communications/statements/commission-report-and-path-forward>.

²⁰¹ “Our Football Program,” UMD, Office of the President, Communications, last modified October 31, 2018, <https://president.umd.edu/communications/statements/our-football-program>.

²⁰² Liam Farrell, “Student-Athletes Get Online Tool to Report Concerns,” *MarylandToday*, August 28, 2018, <https://today.umd.edu/articles/student-athletes-get-online-tool-report-concerns-e5bb761a-b76c-4f54-8ecd-3752221563fe>.

a sports supervisor, senior administrator or Faculty Athletics representative to discuss the problem.²⁰³ Athletic Director Damon Evans promoted this new tool, sharing that he wants to make sure all student-athletes have the ability to communicate any issues or concerns and thus ensuring an atmosphere that encourages open and honest dialogue.²⁰⁴

While all of this has been going on, the student-athletes of the football team have united together and dedicated their season to McNair. At the onset of the season, the team decided to honor McNair's life through an annual scholarship for a football student-athlete, naming the offensive line room in Cole Field House after him, encasing his locker in glass, a moment of silence before the season opener against Texas and the home opener against Temple, wearing a #79 sticker on their helmets for the whole season and not allowing anyone to wear #79 through what would've been McNair's graduation year.²⁰⁵ On UMD's first play at the season opener game against Texas at FedEx Field, the offense lined up with only ten players, leaving a gap for McNair at right guard.²⁰⁶ The Terps went on to win against Texas, 34-29.

Since the start of the football season, the players have grieved over McNair's death while working hard to honor him with their season. This showing of strength, fortitude and dedication is what the University, and any university, desires to see in its student-athletes. However, it shouldn't take such a tragedy to encourage teammates to grow with each other and share their struggles and concerns both about themselves or about others. Creating an environment that makes student-athletes feel safe and

²⁰³ Farrell, "Student-Athletes Get Online Tool."

²⁰⁴ Farrell, "Student-Athletes Get Online Tool."

²⁰⁵ "Team Announces Plans to Honor McNair," UMTerps, last modified August 20, 2018, <https://umterps.com/news/2018/8/20/football-team-announces-plans-to-honor-mcnair.aspx?path=football>.

²⁰⁶ "Terps Open Season with 34-29 Win Over #23 Texas," UMTerps, last modified September 1, 2018, <https://umterps.com/news/2018/9/1/football-terps-comeback-to-top-23-texas-34-29.aspx?path=football>.

comfortable enough to question and discuss the decisions of an athletic department, coaches or staff or to share their struggles and break down the stigma of mental illness and other beliefs about athletes as discussed earlier is paramount.

Housing of Athletes

Understanding how student-athletes are currently housed on the University of Maryland's campus can help in determining how this thesis proposal should target student-athletes in terms of units provided or class year included. Every year, the Department of Resident Life (ResLife) gives the Athletic Department a specific number of spaces (beds) across campus for student-athletes.²⁰⁷ These spaces are generally in the South Hill Community, which includes different unit types such as suites, apartments and traditional style housing (Figure 26). Roommates in a student-athlete unit are always all student-athletes since mixing in non-athletes has often led to isolation from other roommates largely due to differences in schedules.²⁰⁸ Since the NCAA now grants scholarships based on cost of attendance instead of cost of living or room and board, student-athletes have access to more funds to pay for housing.²⁰⁹ This often leads to scholarship athletes leasing more expensive on-campus spaces (i.e. suites or apartments) or even going off-campus to lease amenity-filled luxury apartments.²¹⁰ Many of the student-athletes who are assigned to on-campus spaces are scholarship athletes from non-revenue sports.²¹¹ Most of the revenue sports' athletes (i.e. football and men's and

²⁰⁷ Interview with Scott Young, Department of Resident Life, Associate Director, Administrative & Business Services, November 30, 2018.

²⁰⁸ Interview with Scott Young.

²⁰⁹ Interview with Scott Young.

²¹⁰ Interview with Scott Young.

²¹¹ Interview with Scott Young.

women's basketball) live off-campus in apartment complexes.²¹² Non-scholarship student-athletes are generally mixed in with the rest of the general student body.

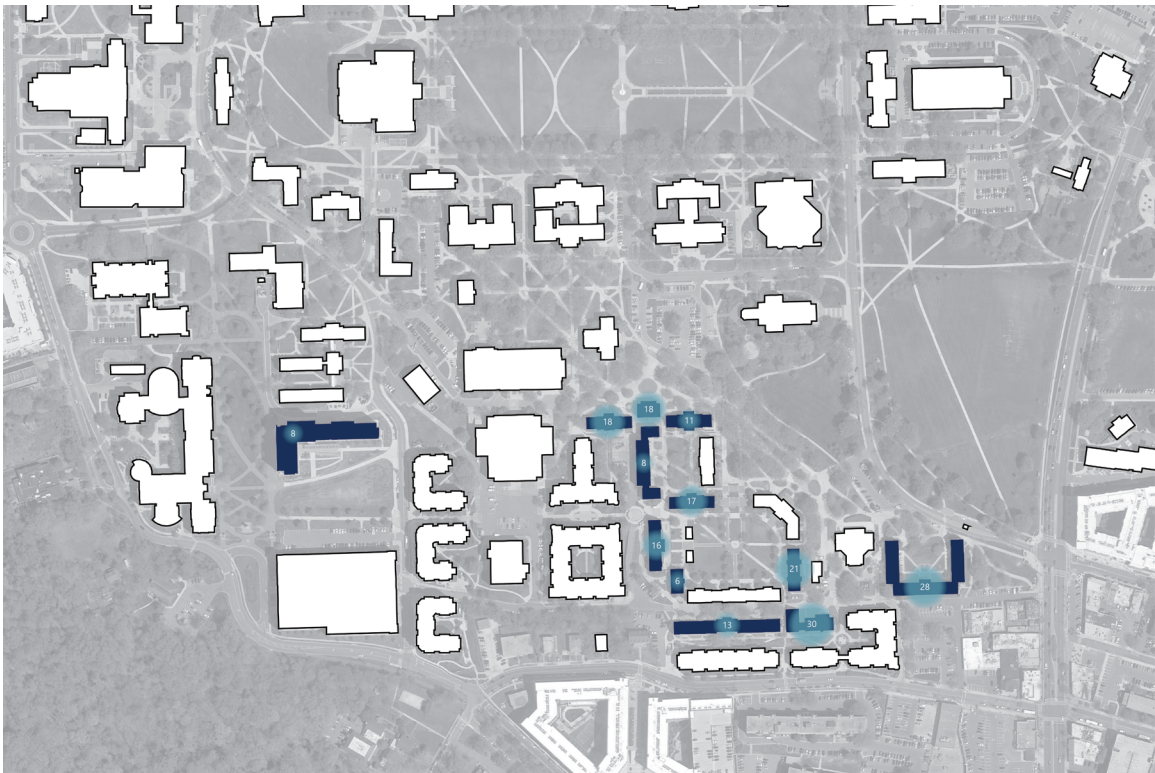


Figure 26. Location of the 194 designated student-athlete beds in the 2018-2019 academic year, not to scale (Source: Author)

The cost of room and board in this proposed student-athlete housing should be tuition-based like other residence halls on campus and therefore should be open to non-scholarship student-athletes just as easily as to those who do have a scholarship. UMD's Athletic Department could use the results of pre-participation mental health screenings (NCAA Best Practice #3 discussed in Chapter 3) or questionnaires of preference of residence hall to decide who is assigned to the spaces given to them by ResLife. Forty-nine percent of the beds in the proposed residence hall would therefore become a part of the spaces ResLife leases to the Athletic Department every year.

²¹² Interview with Scott Young.

Current Housing Conditions and Plans for Future Housing

On-campus residence halls have started to deteriorate due to age or they have started to face major issues, such as the mold problem this year.²¹³ Future housing will specifically look at HVAC systems that can handle short-term heavy rains and constantly changing weather in this area.²¹⁴ There will not be any more construction of apartments on-campus and the University is also trying to phase out triples and quads, so new construction will focus on singles, doubles or semi-suites.²¹⁵ The Department of Resident Life is looking closely at how on-campus residence halls can be transformed into an asset to the University and how new construction can aspire to this.²¹⁶ Public-private partnerships seem to be the next step in constructing state-of-the-art residence halls that can more adequately address students' needs in this day and age.²¹⁷ This opportunity for public-private partnerships could be a possible route for this student-athlete housing, since many other student-athlete housing examples were funded from alumni athletes.

The University published a Facilities Master Plan in 2011, laying out the future growth and development of the campus for the next twenty years. The plan addresses three main issues on campus: environmental stewardship and sustainability, landscape design and land use and vehicular and pedestrian circulation.²¹⁸ It also discusses how the different districts of campus will be built out over the years, including several residential projects (See Appendix E).

²¹³ "Communication Shared with Students regarding Mold Concerns," UMD Department of Resident Life, accessed December 11, 2018, <http://reslife.umd.edu/moldconcerns/>.

²¹⁴ Interview with Scott Young.

²¹⁵ Interview with Scott Young.

²¹⁶ Interview with Scott Young.

²¹⁷ Interview with Scott Young.

²¹⁸ "Facilities Master Plan 2011-2030," UMD Facilities Management, accessed September 30, 2018, <https://www.facilities.umd.edu/documents/fmp/2011-2030%20facilities%20Master%20Plan.pdf>, 2.

There are several locations for future residence halls across campus. In the South District, a 4-floor residence hall of 233 beds will replace Worchester Hall.²¹⁹ In the Northwest District, several residence halls will be constructed in two separate planning periods. Two 9-floor undergraduate residence halls of 515 beds each (169,950 GSF each) will be constructed in the first planning period, while an 8-floor residence hall of 650 beds (240,300 GSF) will fill out the Denton Community where the Center for Young Children currently stands.²²⁰ A Facilities Master Plan Update in 2017 (Figure 27) shows an additional residence hall of 900 beds (303,500 GSF) in the Northwest District.²²¹ This residence hall will be located on the soccer practice fields next to Maryland Stadium and is currently being designed.

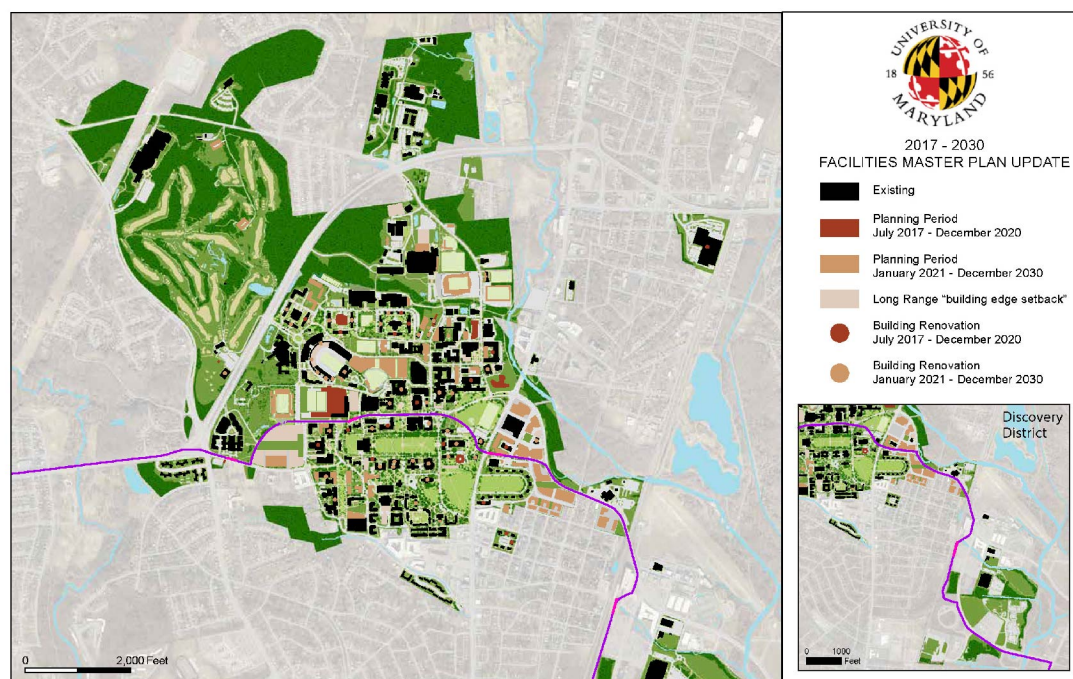


Figure 27. Facilities Master Plan 2017-2030 Update (Source: UMD Facilities Management)

²¹⁹ UMD Facilities Management, “Facilities Master Plan 2011-2030,” 72.

²²⁰ UMD Facilities Management, “Facilities Master Plan 2011-2030,” 84.

²²¹ “Facilities Master Plan 2017-2030 Update,” UMD Facilities Management, accessed September 30, 2018, https://www.facilities.umd.edu/Documents/FMPUpdate2017_approvedWeb.pdf, 36.

In 2014, The Department of Resident Life published a strategic plan for on-campus student housing, developed by the University of Maryland and a planning team of Hanbury Evans Wright Vlattas + Company and Anderson Strickler, LLC (Figure 28).²²² This report goes into more detail about residential facilities than the Facilities Master Plan by looking at current housing on-campus, trends of peer institutions, goals, visions, and site development (See Appendix F).²²³ While this is a separate report from the Facilities Master Plan discussed above, the two reports are strongly aligned and the same sites are planned for residential construction.

²²² “On-Campus Student Housing Strategic Plan 2014,” UMD Department of Resident Life, accessed September 30, 2018, <http://reslife.umd.edu/global/documents/hsp/umdchsp.pdf>.

²²³ UMD Department of Resident Life, “On-Campus Student Housing Strategic Plan 2014,” iii.

SITE SCENARIOS

PROJECT SITE	QTY.	OPENING
A Lot 1 - Phase 1 and 2	800 + 700 Beds	Fall 2018 & 2019
B Varsity Practice Field	880 Beds	Fall 2021
C New North Hill Building	450 Beds	Fall 2022
D New Ellicott Community Building	350 Beds	Fall 2023

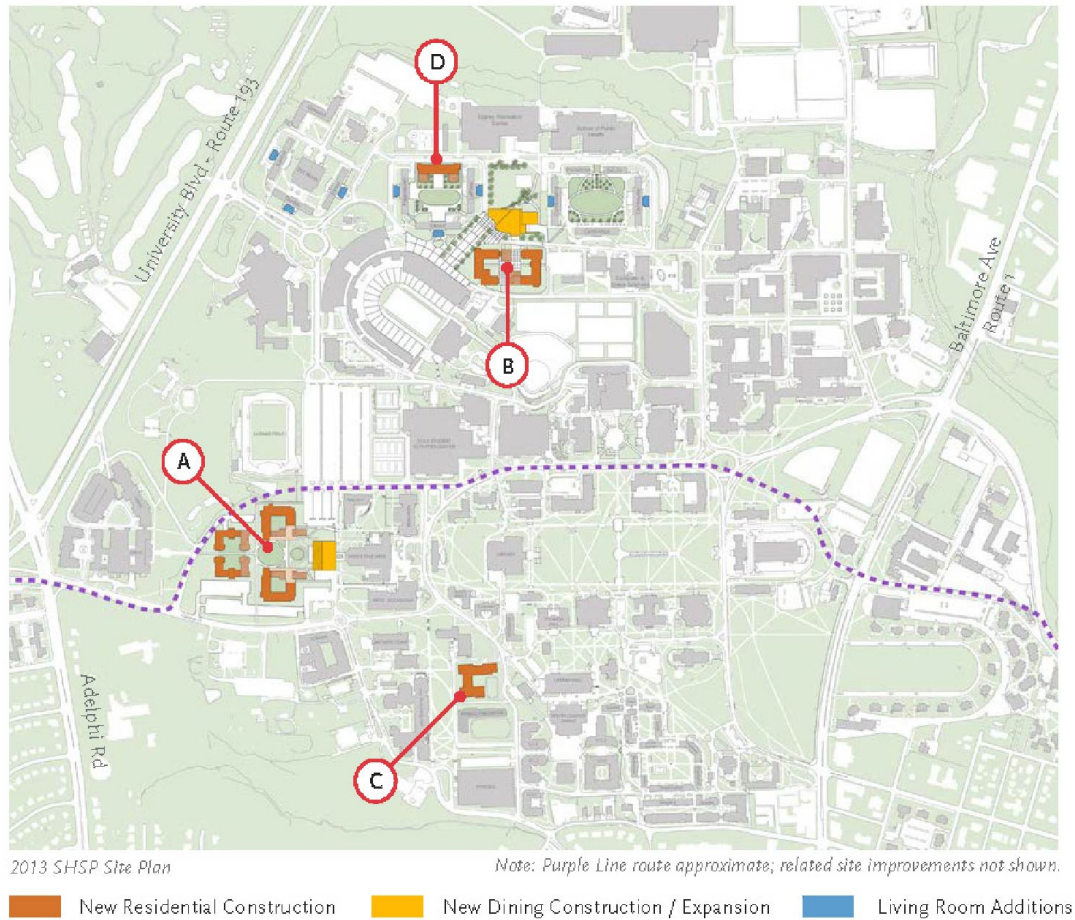


Figure 28. 2014 Student Housing Strategic Plan (Source: UMD Department of Resident Life)

Understanding on-campus housing options for student-athletes and the future of on-campus housing for the University in general has provided an informative foundation of knowledge to be able to move forward and layout the location and design of this proposal. In some ways, this design will align with the University’s desires and plans for

the future, while in other ways it will push past what is normal and accepted for on-campus housing today.

Site Selection Process

Understanding the University's plans for future housing, as discussed above, brought about the initial direction for choosing a site. It was important to ground this thesis site in reality and therefore look at sites that are already notated for future residential use. UMD's "Facility Master Plan 2017-2030 Update" and "2014 On-Campus Student Housing Strategic Plan" provided several residential development areas, which led to the selection and comparison of three potential thesis sites: Oakland Community Site 1, Oakland Community Site 2 and the Practice Field Site (Figures 29 and 31).

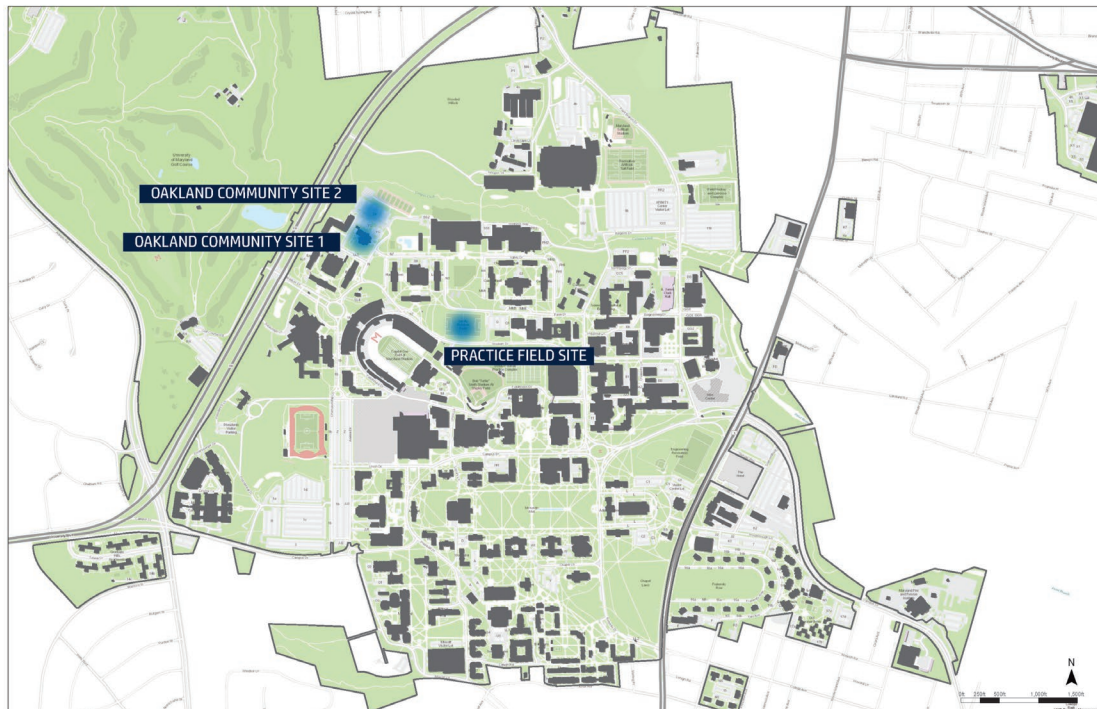


Figure 29. Three potential sites on the University of Maryland Campus (Source: Author)

Each site was compared and ranked through 13 different criteria in three main categories: Context, Assets and Access. These categories allowed for a critical look at the sites from different perspectives. Each category had a highly prioritized driver, notated in the shaded rows. A site's connection to nature and existing open spaces were a high priority since this thesis utilizes the design principles of healing architecture, especially the role of nature. A site's proximity to other residence halls was also important because the targeted student-athlete population should be integrated with the rest of the general student body. Finally, a site's visibility from the University population's perspective was another key criteria. In order to recuperate and move towards healing and finding true health, people need to be able to experience both private individual spaces and public social ones, all while feeling comfortable and trusting of their immediate surroundings. Because of this sensitive aspect of the built environment, the chosen site should have some aspect of privacy and protection.

Each site was ranked on its satisfaction of each criteria by using a point system: a "1" represents a low and poor score, while a "10" represents a high and positive score (Figure 30). After working through all three categories of criteria, each site's points were added up to a final score out of 130 points (thirteen total criteria). The Oakland Community Site 2 had the highest score of 93/130, followed by the Oakland Community Site 1 with 89/130 points and then the Practice Field Site with the lowest score of 88/130 points. Oakland Community Site 2, the highest ranked site, also scored very high in the three main drivers of each category. Because the two Oakland sites had the highest scores of each category and they each have advantages that add to the other's weaknesses, the final chosen site is a combination of these two sites (Figure 32).

This final site has many promising opportunities since it is in close proximity to other dorm communities and is also close to athletic complexes and fields (Figure 33). Most importantly, it is located along a natural edge that extends along the north side of campus from the golf course across Route 193 down to Route 1 and the larger Paint Branch Creek. This natural and organic edge is an essential element to this proposed community. It also has a fairly low visibility since it is located towards the back of the North Campus dorms and has a large enough footprint to design for more privacy and protection.

		OAKLAND COMMUNITY SITE 1		OAKLAND COMMUNITY SITE 2		PRACTICE FIELD SITE	
CONTEXT	CONNECTION TO NATURE / OPEN SPACES*	5	PROXIMITY TO RARELY USED WOODED AREA BETWEEN THE ELLICOTT AND DENTON COMMUNITIES	10	ADJACENT TO WOODED EDGE OF NORTH CAMPUS	3	PROXIMITY TO LA PLATA BEACH RECREATIONAL SPACES
	ON-CAMPUS	10	LOCATED ON NORTH CAMPUS	10	LOCATED ON NORTH CAMPUS	10	LOCATED ON NORTH CAMPUS
	ALREADY PROGRAMMED FOR HOUSING BY UNIVERSITY	10	"NW 5" IN THE FACILITIES MASTER PLAN 2017-2030 UPDATE	10	"NW 3" AND "NW 4" IN THE FACILITIES MASTER PLAN 2017-2030 UPDATE	10	"B1" IN THE 2014 "ON-CAMPUS STUDENT HOUSING STRATEGIC PLAN"
	SITE / PROGRAM FLEXIBILITY	7	2.2 ACRES	6	1.9 ACRES	9	2.81 ACRES
	DEMOLITION REQUIRED	2	HIGH (CENTER FOR YOUNG CHILDREN (CYC))	6	MEDIUM (PARKING LOTS)	9	LOW (PRACTICE FIELDS)
ASSETS	PROXIMITY TO OTHER RESIDENCE HALLS*	9	.03 MI. TO OAKLAND HALL; .08 MI. TO ELKTON HALL	8	.02 MI. TO OAKLAND HALL; .11 MI. TO ELKTON HALL	3	.10 MI. TO ELLICOTT HALL; .13 MI. TO CUMBERLAND HALL
	PROXIMITY TO ATHLETIC COMPLEXES AND FIELDS	4	.66 MI. TO COLE FIELD HOUSE; .44 MI. TO XFINITY CENTER; .19 MI. TO EPPLEY RECREATION CENTER	6	.62 MI. TO COLE FIELD HOUSE; .30 MI. TO XFINITY CENTER; .19 MI. TO EPPLEY RECREATION CENTER	7	.38 MI. TO COLE FIELD HOUSE; .38 MI. TO XFINITY CENTER; .20 MI. TO EPPLEY RECREATION CENTER
	PROXIMITY TO DINING SERVICES	8	.10 MI. TO DENTON DINING HALL	5	.17 MI. TO DENTON DINING HALL	8	.09 MI. TO ELLICOTT DINING HALL
ACCESS	LOW VISIBILITY*	6	TOWARDS THE NORTH/BACK AREA OF NORTH CAMPUS RESIDENCE HALLS	10	TUCKED BEHIND NORTH CAMPUS RESIDENCE HALLS	1	MAJOR PEDESTRIAN PATHS BETWEEN RESIDENCE HALLS AND ACADEMIC BUILDINGS
	WALKABILITY	6	DECENT SIDEWALK CONNECTIONS TO EXISTING CYC	5	SOME SIDEWALK CONNECTIONS TO PARKING LOT	9	MANY SIDEWALK CONNECTIONS
	CAMPUS BUS ACCESS	8	.05 MI. TO ELKTON HALL STOP; .08 MI. TO HAGERSTOWN HALL STOP	5	.14 MI. TO ELKTON HALL STOP; .10 MI. TO HAGERSTOWN HALL STOP	2	.10 MI. TO LA PLATA HALL STOP; .15 MI. TO CAMBRIDGE HALL STOP
	BICYCLE ACCESS	6	DECENT SIDEWALK/ROAD CONNECTIONS TO EXISTING CYC; EXISTING BIKE RACKS	5	SOME SIDEWALK/ROAD CONNECTIONS TO PARKING LOT; EXISTING BIKE RACKS	8	MANY SIDEWALK/ROAD CONNECTIONS; NO BIKE RACKS
	VEHICULAR ACCESS	8	ROADS TO EAST AND SOUTH	7	ROAD ACCESS TO PARKING LOT	9	ROADS TO NORTH AND SOUTH
		89/130	34 21 34	93/130	42 19 32	88/130	41 18 29
		* - MAJOR DRIVERS IN THEIR RESPECTIVE CATEGORIES					

Figure 30. Site matrix (Source: Author)

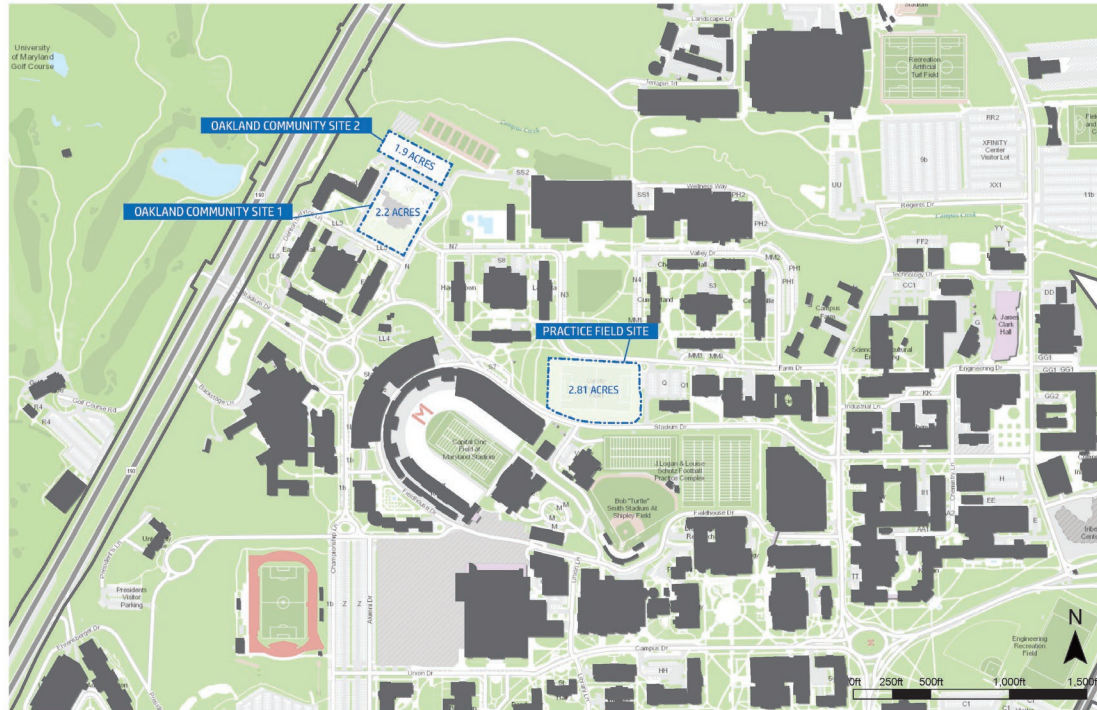


Figure 31. Boundary and size of each potential site (Source: Author)



Figure 32. Final chosen site (Source: Author)

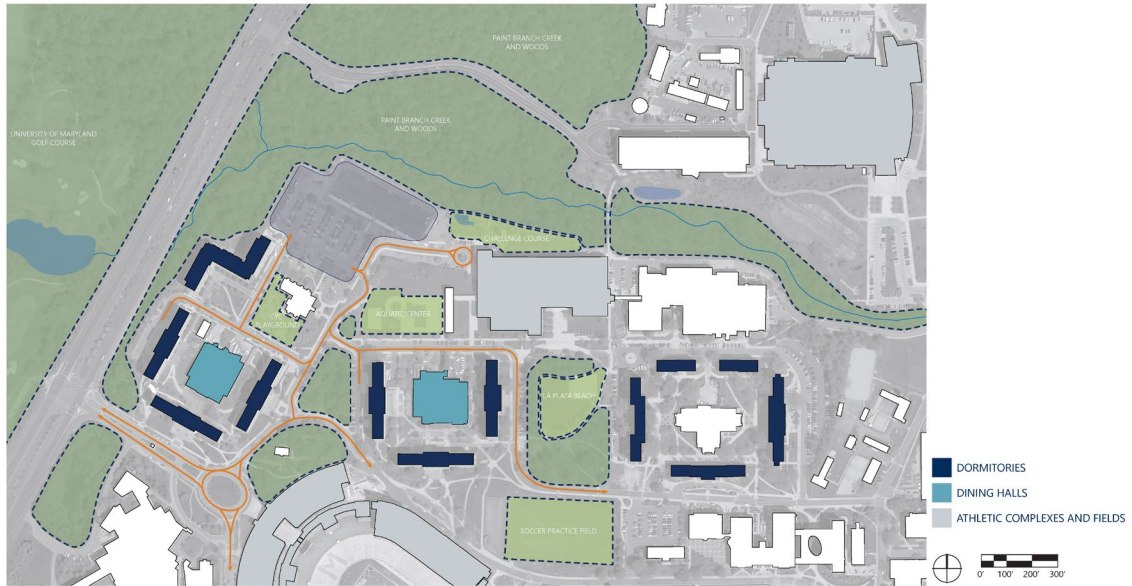


Figure 33. University of Maryland campus in relation to dorms, dining halls and athletic complexes and fields (Source: Author)

Site Analysis

The chosen site has many unique qualities about it. The north and west edges are along an untouched natural wooded area, while the south and east edges border the built edges of North Campus (Figure 34). Several recreational areas are located nearby, including the Eppley Recreation Center (ERC)'s challenge course and Aquatic Center and also La Plata Beach. A system of wooded green spaces reaches up from the south and touches the southeast corner of the site. The site's topography slopes down to the north and bottoms out in the Campus Creek that runs east-west through the woods, where it sits in a valley (Figure 35).



Figure 34. Connections to natural conditions and recreational spaces (Source: Author)

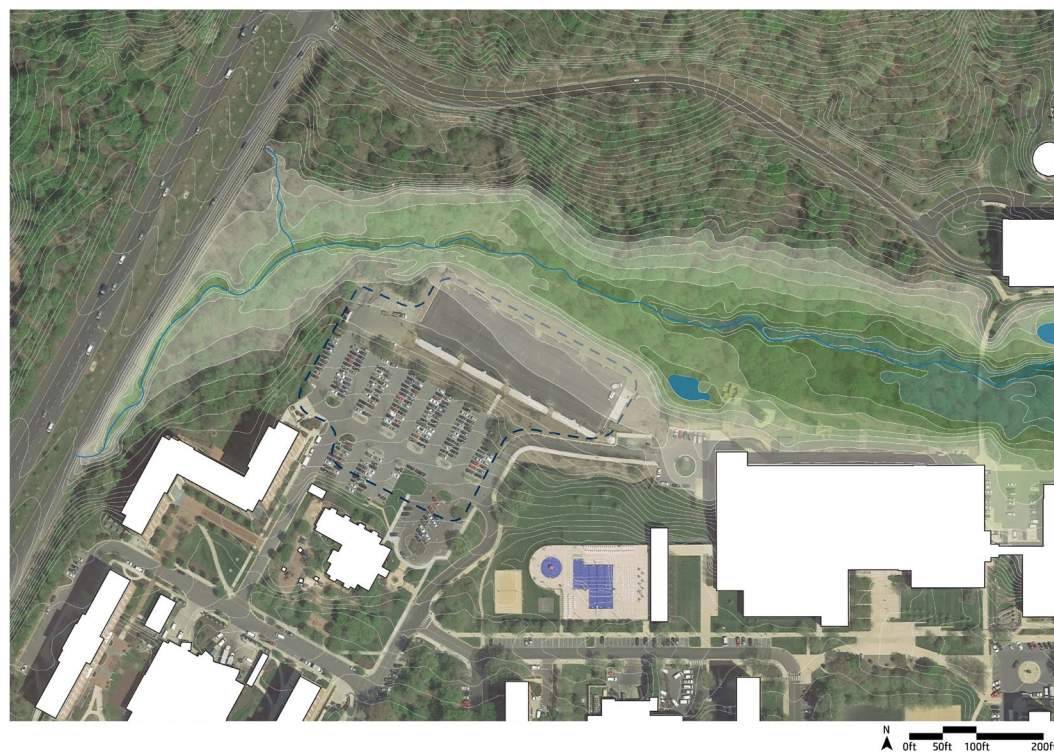


Figure 35. Valley created by topography and creek north of site (Source: Author)

The site is accessible by vehicle, bicycle, and walking because it currently exists as a parking lot (Figure 36). Two roads enter the site from the southwest and southeast. Pedestrians are able to access the site along these roads and also from neighboring buildings including Oakland Hall, the Center for Young Children (CYC) and the ERC. The Hagerstown bus stops is the only UMD shuttle stop in the nearby vicinity. The existing roads and sidewalks create major axes and view corridors to the site (Figure 37). While the south and east edge of the site is subject to these axes and views, the wooded area to the north and west create privacy and protection. While this wooded area acts as a sort of buffer, Route 193 behind it to the west is the source of a high amount of noise heard on-site (Figure 38). There is also some noise coming from the CYC playground and ERC outdoor spaces.



Figure 36. Vehicular and pedestrian access to site (Source: Author)



Figure 37. Major axes and view corridors on site (Source: Author)

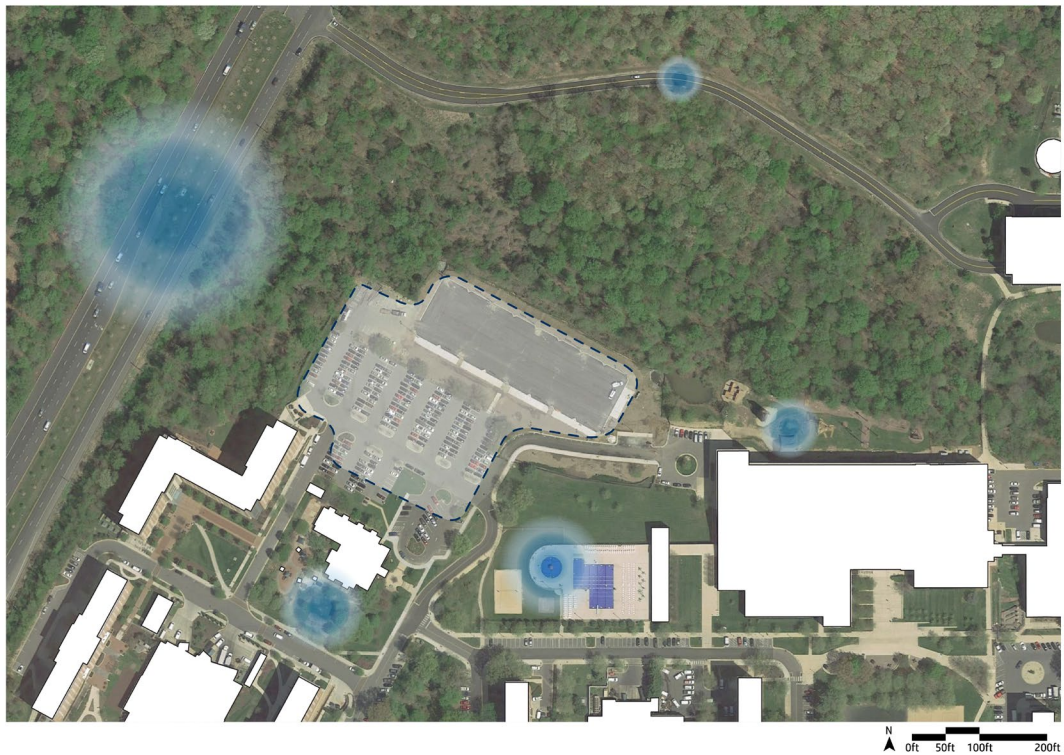


Figure 38. Sources of noise around site (Source: Author)

Understanding the major characteristics of the site and its surrounding context gives direction to program placement and organization of this design proposal. Responses to both good and bad qualities of the site will push this design to become one that is truly beneficial to the student-athletes and students who will live here and to the University as a whole.

CHAPTER 7 | Building Program

The precedents discussed in Chapter 5 provided a great amount of knowledge and inspiration in beginning to piece together the program for this proposal. Another crucial piece to understanding what kind of program is necessary for UMD's campus was looking at the residential unit typologies and aggregations in numerous and varying residence halls on campus.

UMD Residential Unit Typologies and Aggregations

The University of Maryland has a total of 37 residence halls on campus, and each house a wide range of unit types and aggregations. Five residence halls were closely analyzed to better understand the types of units offered to students and how each building or floor creates an environment for continuous interaction and community. "Community" could refer to the number of residents to a Resident Advisor (RA) or it could be the interactions and spaces that allow residents to get to know one another. The full diagrammatic analysis of these five halls can be found in Appendix G.

Elkton Hall, Prince Frederick Hall, Oakland Hall, Washington Hall and Montgomery Hall cover a wide range of units including singles, doubles, triples, quads, semi-suites, suites, and apartments. The halls that had more of the traditional or semi-suite configurations also had more communal spaces on each floor for residents to interact (Figure 39). In contrast, the halls with suites and apartments had little or even no spaces or opportunities for interaction other than inside the units.

UMD Residence Hall Info

	Location	Year Constructed	Number of Stories	Gross Square Feet (GSF)	Net Assignable Square Feet (NASF)	Number of Residents	NASF/Resident
Elkton Hall	Denton Community (North Campus)	1966	8	114,118	73,141	555	131.8
Prince Frederick Hall	North Hill Community (South Campus)	2014	7	187,060	99,311	462	215.0
Oakland Hall	Denton Community (North Campus)	2011	8	233,436	140,877	640	220.1
Washington Hall	South Hill Community (South Campus)	1940 (Ren. 1986)	3	23,792	18,078	115	157.2
Montgomery Hall	South Hill Community (South Campus)	1955 (Ren. 1989)	4	59,825	46,164	282	163.7

* Singles, doubles, triples, and quads are a one room space

* Semi-suites are one- or two-room units with a private or shared bathroom

* Suites are multi-room units with a shared common space and shared bathroom

* Apartments are multi-room units with a shared kitchen, common space, and bathroom(s)

* Junior and Seniors are not guaranteed on-campus housing at this time

	Gender(s)	Class Year(s)	Living-Learning Programs	Resident Advisor to Residents (per floor)	Types of Units	Communal Public Spaces	Communal Floor Spaces
Elkton Hall	Coed	Freshmen, Sophomores	N/A	2 RA: 60 Residents	singles, doubles, triples, quads	outdoor patio, lobby, lounge	lounge, 2 bathrooms
Prince Frederick Hall	Coed	Freshmen, Sophomores	ACES, DCC	2 RA: 74 Residents	singles, doubles, 1BR semi-suites, 2BR semi-suites	outdoor recreational space, outdoor patio, lobby, multi-purpose room, seminar room	lounge, study room, 2 bathrooms
Oakland Hall	Coed	Sophomores, possibly Juniors and Seniors	N/A	3 RA: 90 Residents	1BR semi-suites, 2BR semi-suites	2 outdoor recreational spaces, 2 outdoor patios, lobby/lounge	2 lounges, 2 study rooms, laundry
Washington Hall	Coed	Sophomores, possibly Juniors and Seniors	N/A	1 RA: 140 Residents (whole building)	3BR suites, 4BR suites, 2BR apts., 4BR apts.	outdoor recreational space, outdoor patio	N/A
Montgomery Hall	Coed	Sophomores, possibly Juniors and Seniors	N/A	2 RA: 76 Residents (may differ per floor)	2BR suites, 3BR suites, 4BR suites, 1BR apts., 2BR apts., 3BR apts., 4BR apts.	outdoor recreational space, outdoor patio	N/A

Figure 39. Comparison of five residence halls and association between unit type and communal spaces
(Source: Author)

This relationship between a hall's unit type and the number of communal spaces can also be seen in the unique sequence of spaces where residents are able to more frequently bump into each other and interact, thus encouraging these groups of people to bond and become more of a community (Figure 40). The quality of these spaces from the moment of entry to passing through a unit door is also critical in making this journey of interaction and community truly influential. Therefore, the journey through the building and the moments of interaction and bonding are a foundational part of this design.

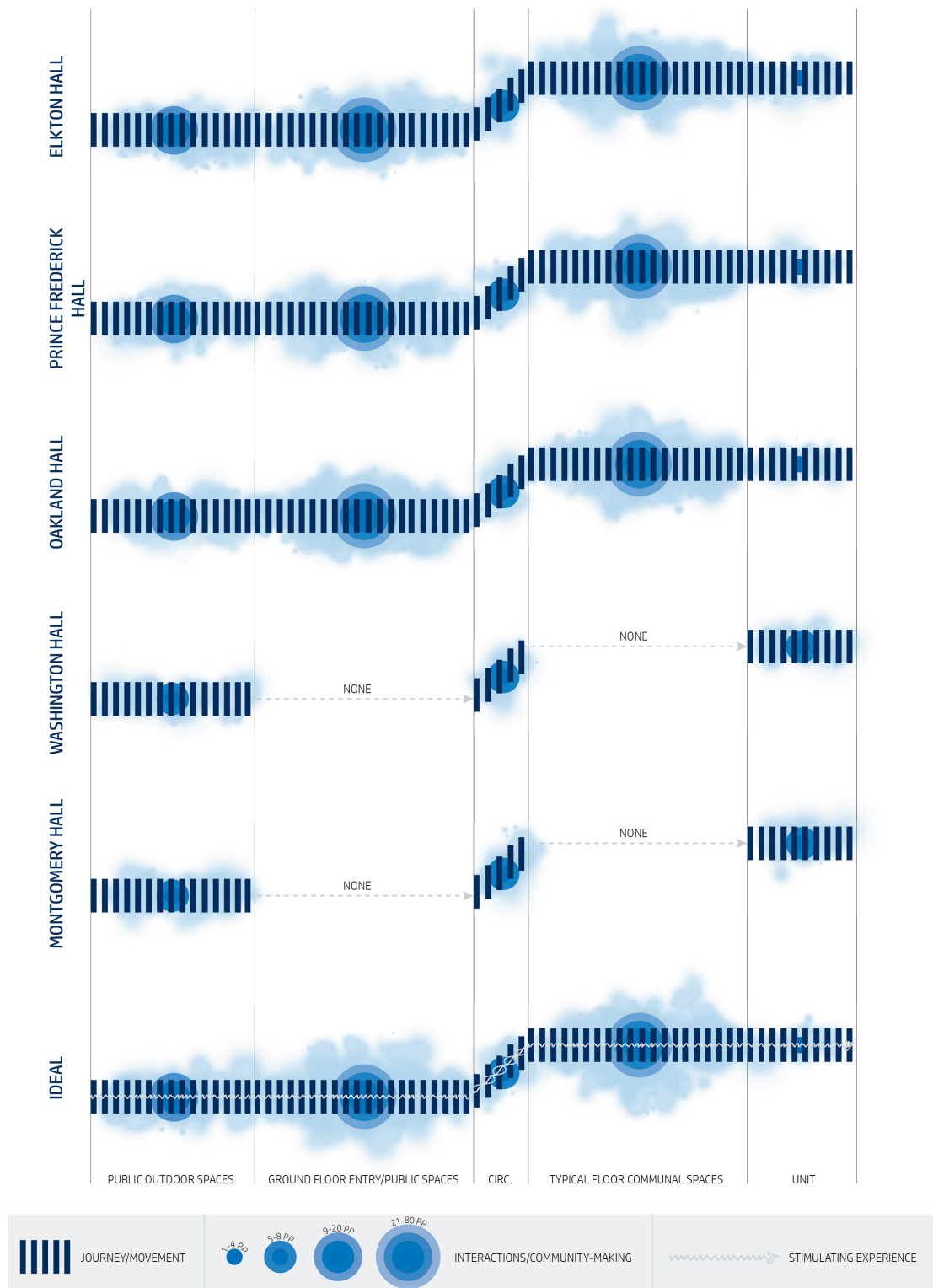


Figure 40. Journeys of interaction and community-making (Source: Author)

Program

The building program for this on-campus residence hall includes general program needed for student housing and both individual and communal program that relates to the mental well-being of the student-athletes and general student population residing in this building (Figures 41 and 42). The building's program as a whole encourages community and a supportive environment for the student-athletes. It also provides resources and spaces that better prepare them in dealing with mental illness or stress in general.

Spaces needed for student housing reference the diverse range of housing already located on the University of Maryland campus. The unit types in this dorm include singles, doubles and one- and two-bedroom semi-suites. As a result of this variety of rooms, there is also a range of bathroom styles that relate to room type.

The additional program of this housing have a variety of uses and sizes in order to promote a healthy environment for the student-athletes and non-athletes. Lounges, study lounges and other large spaces give teams and the resident communities a chance to bond and share in their successes, concerns or struggles together. Smaller individual spaces such as study or meditation rooms allow students to have privacy when they need it, even from fellow roommates. It is important to also provide space for certified counselors, sports counselors and therapists, whether in faculty-in-residence apartments or RA-style rooms. Finally, natural elements weave together indoor and outdoor spaces, giving students the opportunity to experience nature's healing qualities inside and then outside in either programmed or natural spaces.

		QUANTITY	NET ASSIGNABLE SQ. FT. (NASF)	TOTAL NASF
RESIDENTIAL UNITS	SINGLE	40	190	7,600
	RESIDENTIAL ADVISOR SINGLE	10	190	1,900
	DOUBLE	60	240	14,400
	4 PERSON/2 BR/1 BA SEMI-SUITE	84	500	42,000
	1 PERSON/1 BR/1 BA RESIDENTIAL ADVISOR UNIT	18	255	4,590
	2 PERSON/1 BR/1 BA FACULTY-IN-RESIDENCE APARTMENT	4	496	1,984
SHARED SPACES	LOBBY	4	VARIES	5,323
	LOUNGE	8	VARIES	38,152
	SOLARIUM	6	VARIES	3,939
	STUDY LOUNGE	25	VARIES	4,967
	FITNESS STUDIO	19	VARIES	5,555
	KITCHEN	5	VARIES	2,490
	LAUNDRY FACULTY	13	VARIES	1,839
	INTERIOR "PORCH"	VARIES	VARIES	17,914
	ADMINISTRATION	3	VARIES	341
	CLASSROOM	6	VARIES	6,124
	OFFICE	11	VARIES	3,132
	TOTAL NET ASSIGNABLE SQUARE FEET (NASF)			234,053 SQUARE FEET
	TOTAL GROSS SQUARE FEET (GSF)			267,875 SQUARE FEET

Figure 41. Program tabulation (Source: Author)

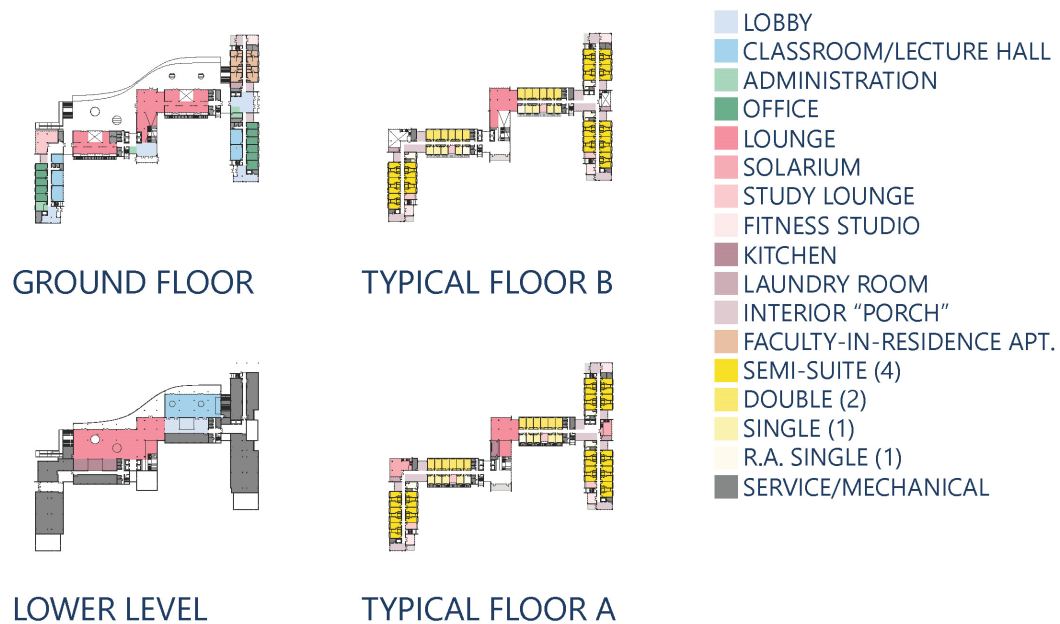


Figure 42. Color-coded program per floor plan (Source: Author)

CHAPTER 8 | Design Solution

Can we create a residence hall model that elevates living conditions from what they currently are today? If we do that wouldn't residence halls become an asset to the University by providing a supportive environment for the students who live there and serving as an attractive environment to prospective students along with academic buildings and programs? This thesis attempts to answer those questions by creating a deployable model for campuses across the country that provides better quality spaces for students, including student-athletes. This thesis creates place and shapes spaces that encourage community and supports the mental well-being of the residents, both the athlete and non-athlete. It also looks at how we can provide spaces outside the typical athletic environment that will better equip student-athletes to be successful students and athletes and support them in becoming resilient to the many stressors they face in their college careers and beyond.

Design Guidelines

Throughout the design process, five guidelines served as the main drivers for the design. As discussed in Chapter 3, it was important to integrate the student-athlete with the non-athlete within this proposed residence hall (Figure 43). Students who aren't athletes can also face stressful situations in college, so this residence hall is just as much for them as it is for the student-athlete. The whole student body deserves a living space that creates community and supports their mental well-being. Integrating these two

populations also helps the student-athlete to socialize and learn from others in a less athletic-driven environment.

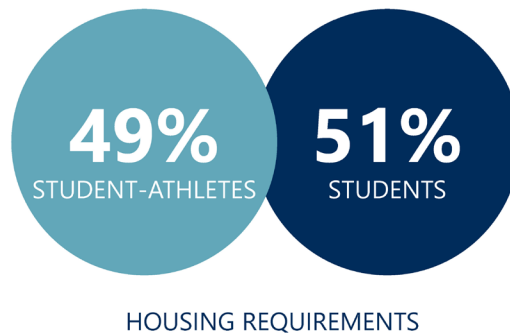


Figure 43. NCAA student-athlete housing requirements (Source: Author)

The organization and aesthetics of this proposed built environment followed four other guidelines (Figure 44). The design should create a range of communities and interactions between student-athletes and non-athletes. These different scales of communities allow for the resident to choose how to interact with others, whether that's intentionally or spontaneously. The different community spaces allow for large group settings, smaller ones, one-on-one conversations and then to even move into a more individual space. The design should also elevate the residents' mental well-being through a therapeutic environment created by connections to nature, natural daylight, materials used and stimulating forms. Maintaining relationships with nature is essential to this design and to the healing process both physically and mentally. Finally, providing space outside of the athletic environment for teammates to come together as a team in an unbiased and safe context became important as well.



Figure 44. Design guidelines (Source: Author)

Early Programmatic Studies and Schematic Options

The proposed program can initially be organized in several ways (Figure 45). Residential units and shared spaces can enclose exterior spaces. Residential units can be arranged in smaller groups that have access to a larger shared space and to exterior spaces. Residential units and shared spaces can also be organized into separate communities that branch off from exterior spaces.

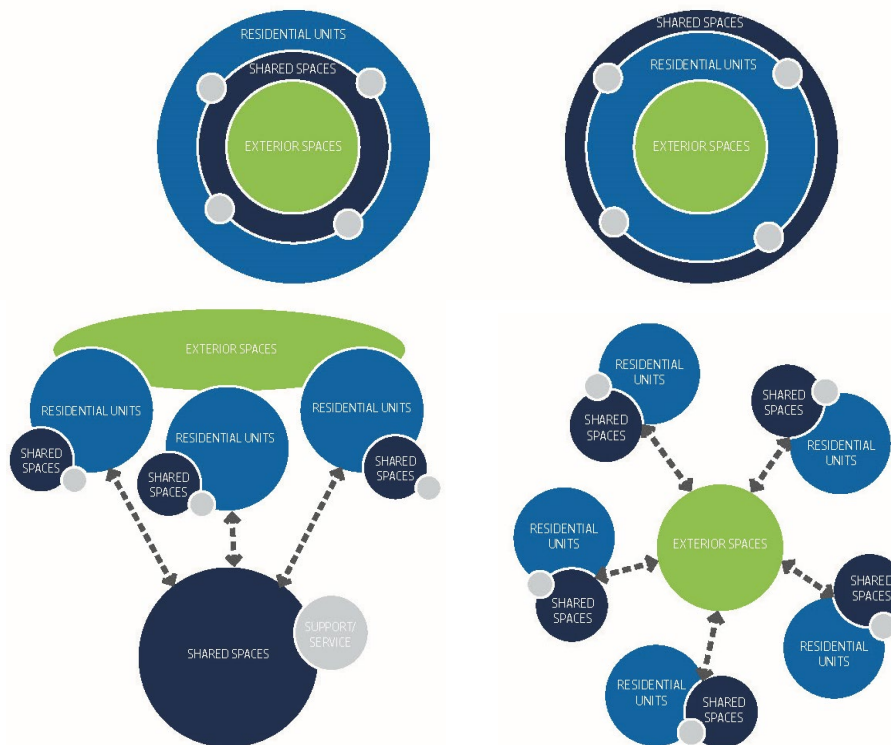


Figure 45. Programmatic studies (Source: Author)

The building form can change based off of these programmatic studies (Figure 46). The residence hall can enclose a courtyard, which would primarily act as a private space for the residents only. The dorm can also extend into the natural environment in several bars or arms, creating smaller communities within each mass. Finally, the dorm can be separated into smaller buildings and thus smaller communities that all interact with a natural space or edge and also tie back to an anchoring common space or building.

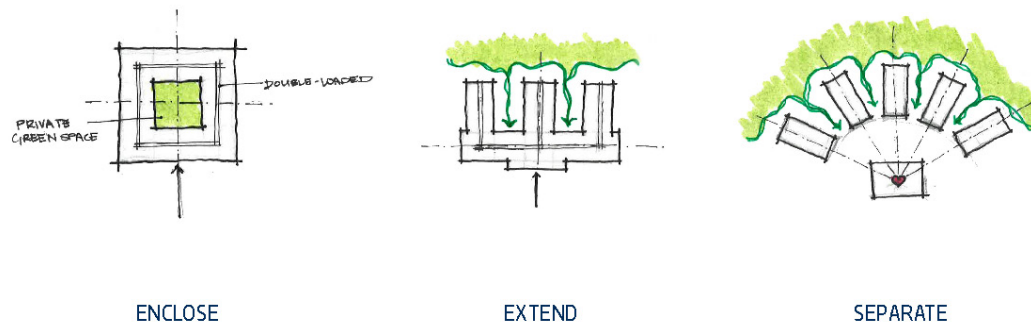


Figure 46. Schematic options (Source: Author)

Design Solution

In designing this community, it was important to create a place for the residents of the whole building to use (Figure 47). The recreational fields to the south create a place for residents and other members of campus to come together (Figure 48). This green space is framed by the student hub to the south and the north-south bars of the residence hall. The student hub acts as a public threshold between the rest of campus and this specific community (Figure 49). Residents of this community and other students can gather inside to grab coffee or work together in the innovation lab and classroom space or the library above. The ground floor café flows out into the north loggia and to the lawn beyond.

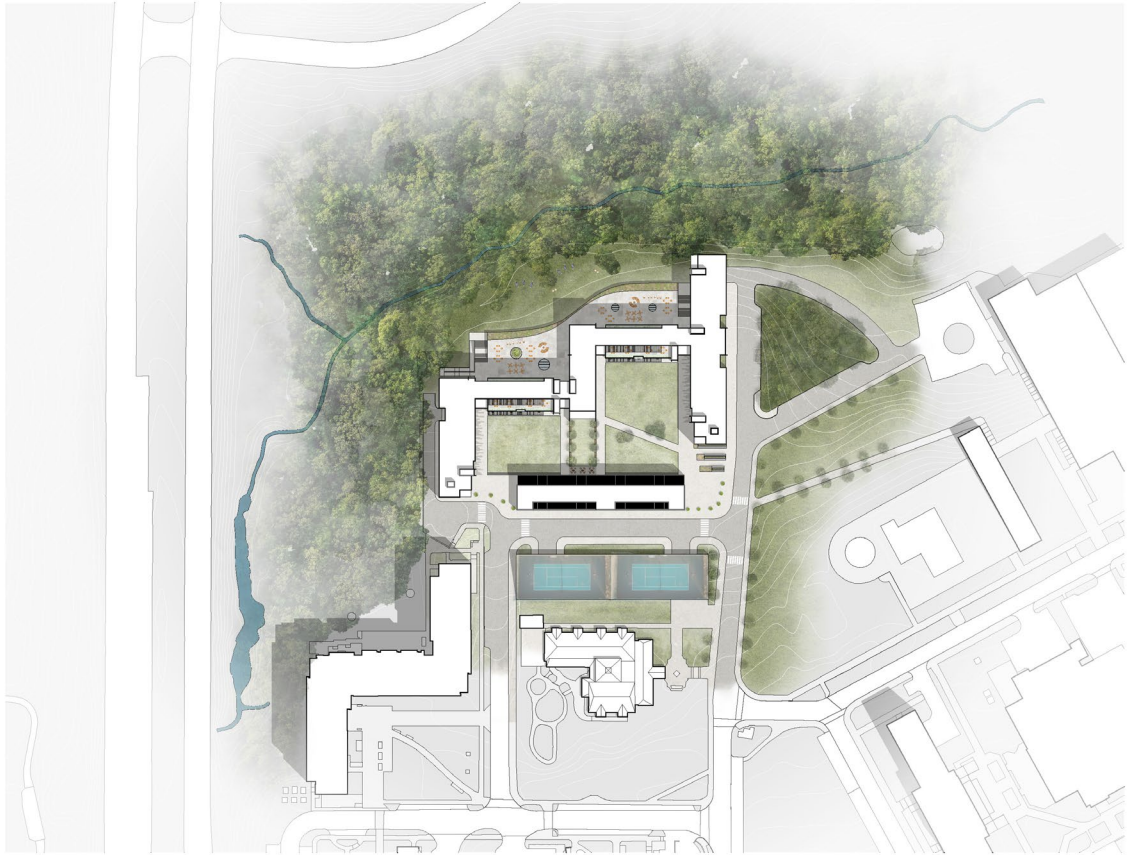


Figure 47. Site plan, not to scale (Source: Author)



Figure 48. Bird's eye view of south recreation fields and student hub (Source: Author)



Figure 49. Plaza perspective from southeast (Source: Author)

The north-south bars begin to pull the user towards the two gaps in the ground floor. These gaps pass through the building and open out to the north patio and the woods beyond. The ground floor focuses on providing larger common spaces that connect residents to natural spaces on both sides of the building. The building community as a whole is provided with ground floor and lower level lounges, dining areas, and a lecture hall (Figure 50 and Figure 51). The ground floor also has academic wings of classrooms and offices and faculty-in-residence apartments that can house licensed counselors or therapists to allow students to seek help on-site in an integrated program that doesn't draw extra attention to the students.

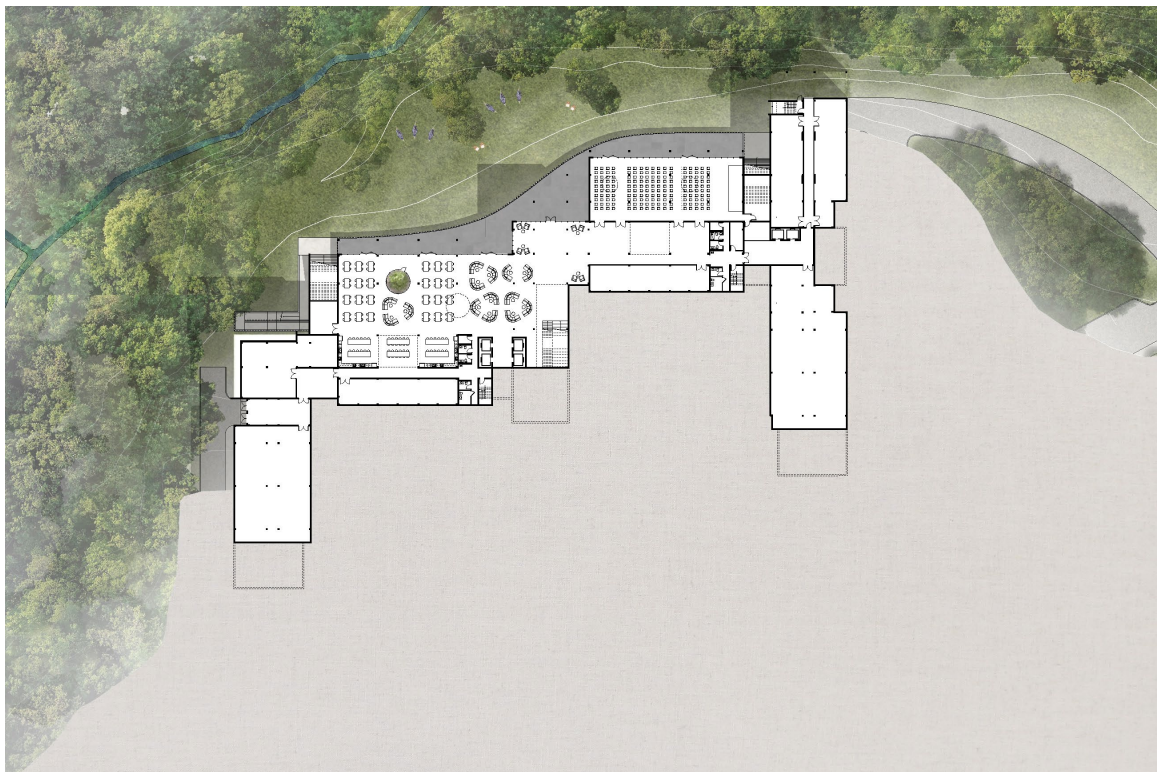


Figure 50. Lower level floor plan, not to scale (Source: Author)



Figure 51. Ground floor plan, not to scale (Source: Author)

The gaps and more transparent zones above create east-west bars that act as a threshold between the built campus and the natural and organic edge (Figure 52). This dorm prioritizes the natural edge rather than turning its back on it or acting as a barrier to it. The ground floor spaces flow out to both sides and the topography of the site allows for two stories of common space to the north, taking full advantage of the woods.



Figure 52. View of north patio and lawn (Source: Author)

As residents moves vertically between floors, the environment transitions to that of smaller residential communities (Figure 53 and Figure 54). Pairs of floors are anchored together with a double height lounge and kitchen space (Figure 55 and Figure 56). Across each floor there are a range of unit types and smaller common spaces (Figure 57). The number of units on the elevations facing the natural edge are maximized so that the greatest number of residents can have a view of nature. Smaller common spaces, such as study lounges and fitness studios, face the recreation fields. These spaces and the units on this side get the maximum amount of sunlight.

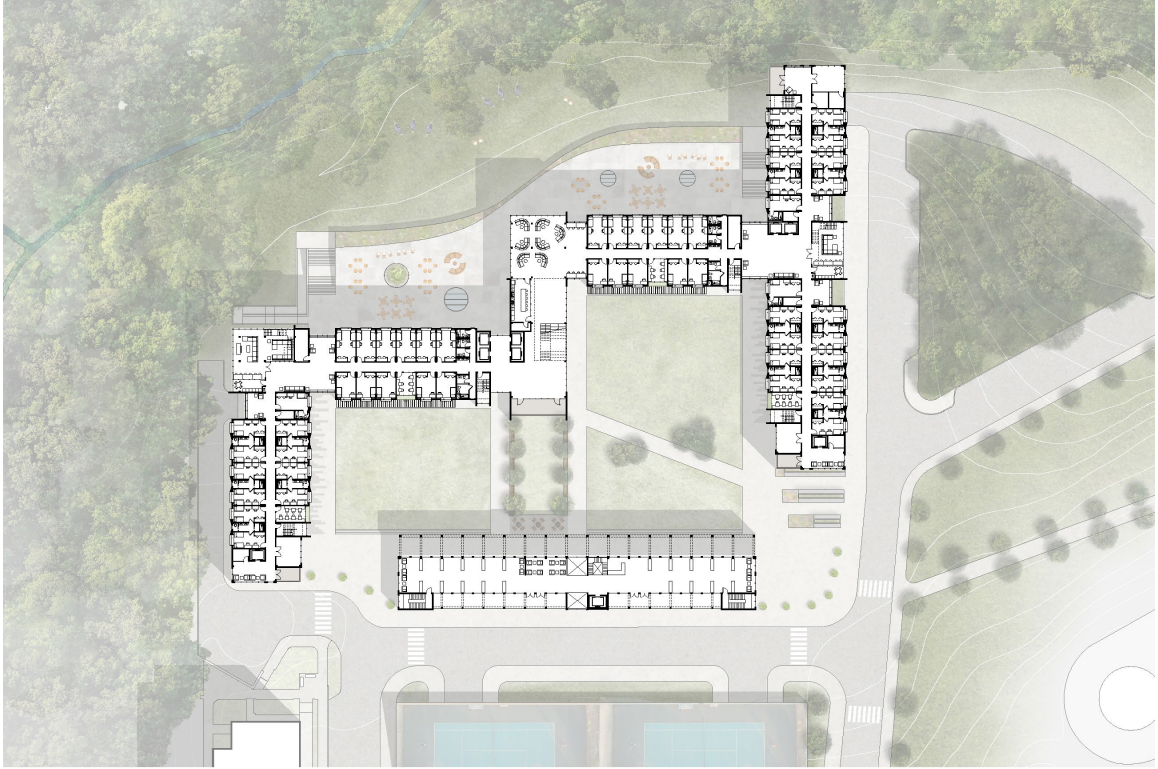


Figure 53. Typical floor plan A, not to scale (Source: Author)

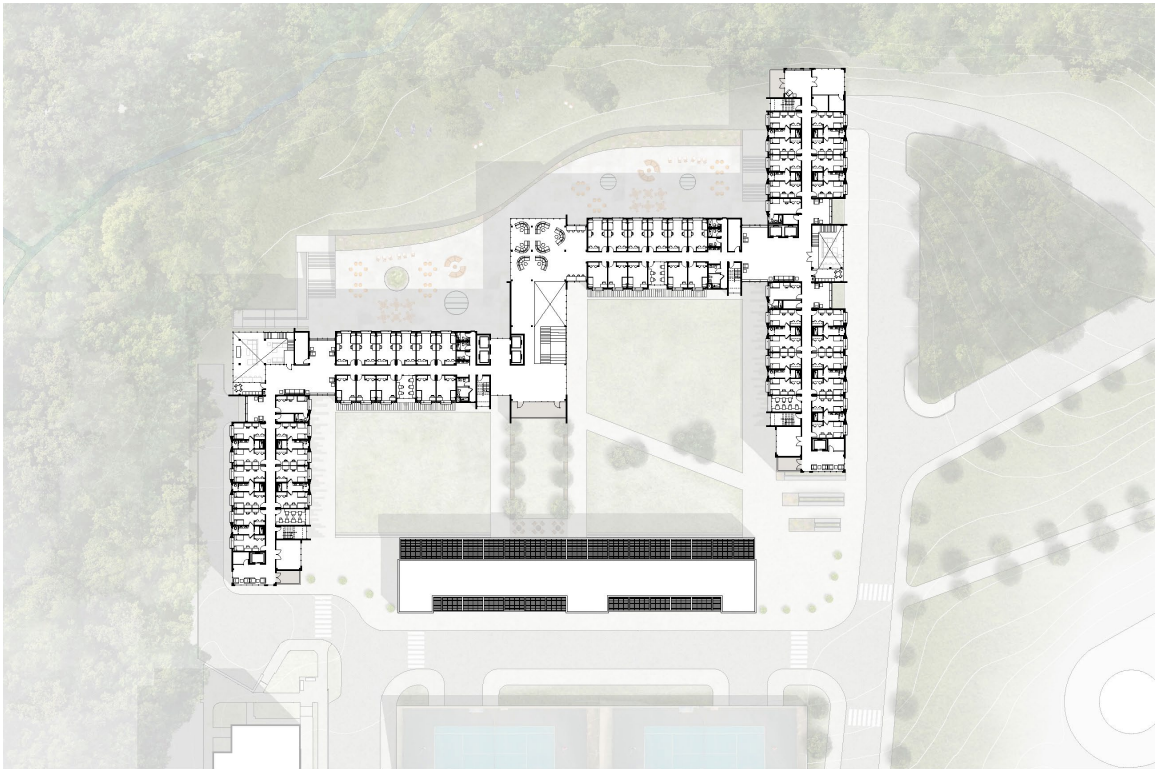


Figure 54. Typical floor plan B, not to scale (Source: Author)



Figure 55. North-south section/West elevation, not to scale (Source: Author)



Figure 56. East-west section/South elevation, not to scale (Source: Author)

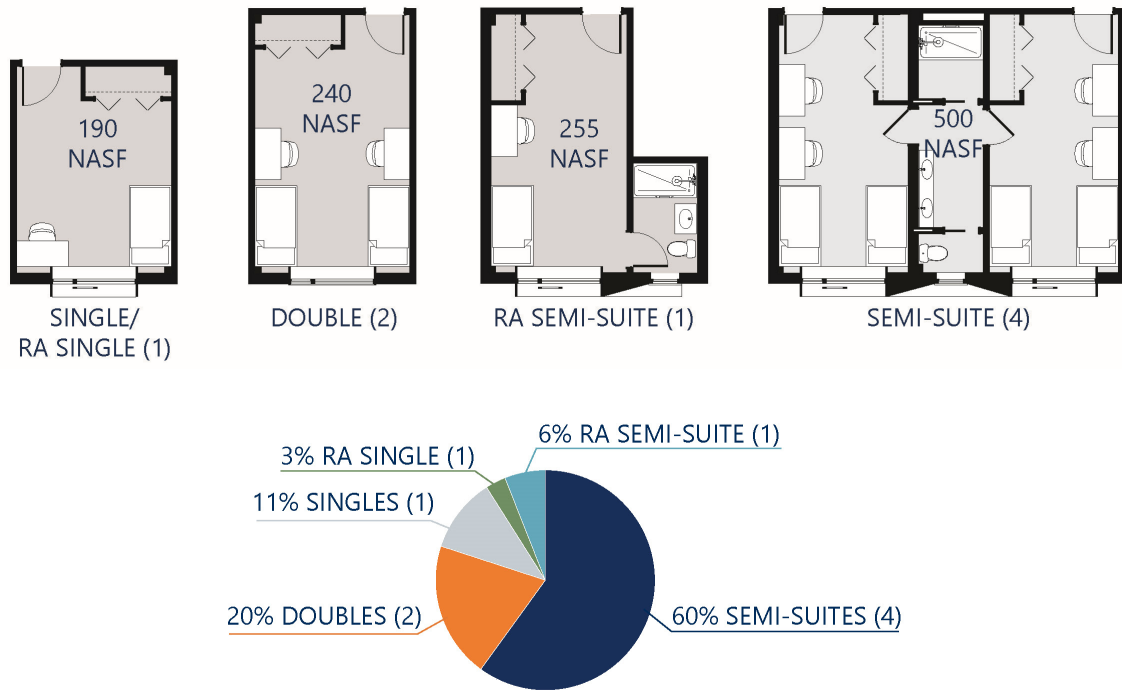


Figure 57. Unit typologies, not to scale (Source: Author)

The common spaces and units within this residence hall promote the mental well-being of the residents through their forms and aesthetics (Figure 58). The large and numerous windows of the common spaces and units maintain connections and views to nature. The use of wood on both the interior and exterior promotes a more cozy and natural material environment for the residents. In addition to seeing the natural edge of the woods beyond the residence hall, plants and green walls are incorporated into the interior environment to maintain a natural element year-round. There are numerous south-facing balconies and patios that can be utilized year-round as well, especially in the fall and winter when the north patio will mostly be in shade.



Figure 58. Solarium and lounge environment (Source: Author)

CHAPTER 9 | Conclusion

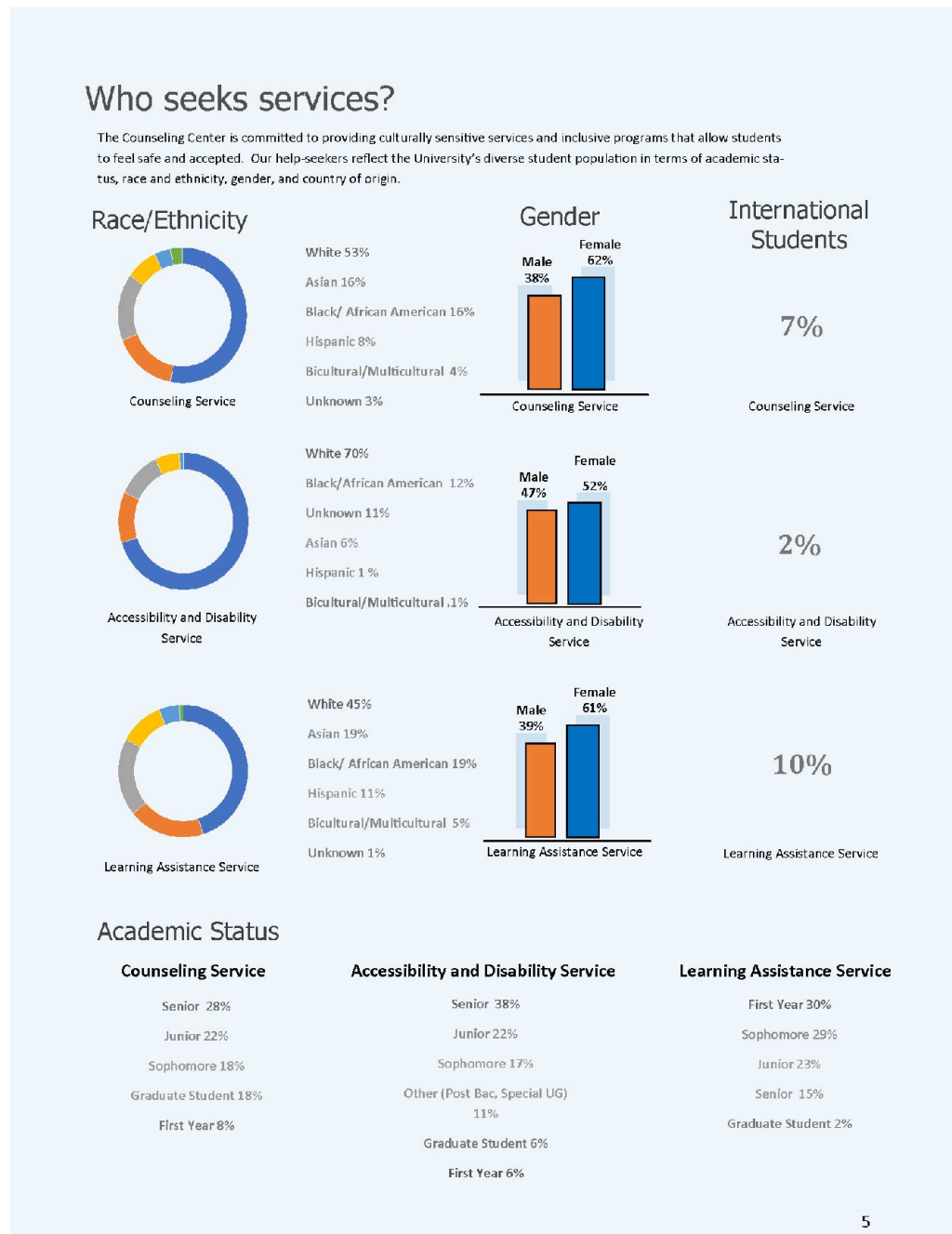
This residence hall prioritizes community and supports the mental well-being of its residents primarily through the interaction of interior and exterior spaces with the natural edge. It provides a beneficial use of a campus edge rather than just turning away from it or using it for parking. It focuses on integrating the student-athlete with the non-athlete in a better quality environment than what is currently offered on campus. By improving the living conditions of on-campus housing, this residence hall creates an engaging yet refreshing and therapeutic environment that encourages the student and student-athlete alike to thrive in their sport, academics and personal and social lives while becoming resilient to the stressors and demands of their college career and beyond.



Figure 59. Final thesis presentation boards (Source: Author)

APPENDIX A | UMD Counseling Center 58th Annual Report (2016-2017)

The UMD Counseling Center shared these statistics in their 58th Annual Report.²²⁴



²²⁴ UMD Division of Student Affairs Counseling Center, "Counseling Center 58th Annual Report, 2016-2017," 5-6

Counseling Service

The Counseling Service in the Counseling Center is the primary campus provider of free and confidential therapy to help UMD students manage personal, social, emotional, career, and academic challenges. Staffed primarily by licensed psychologists, the Counseling Service also conducts campus outreach presentations, provides emergency response services, and assists with referrals to off-campus mental health providers.

2016-2017 Appointments

	2015-2016	2016-2017	% Change
All intake assessments ¹	2,264	2,520	+11
Total client contacts ²	10,273	11,466	+12
Unique clients ³	2,159	2,475	+15

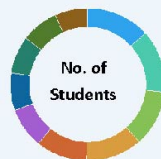
1. "All intake assessments" counts all checked-in intakes for the reporting year. This number will count an individual each time she or he had an intake.

2. "Total client contacts" counts all client appointments in the Counseling Service for the reporting year.

3. "Unique clients" counts each student seen at the Counseling Service once regardless of the number or type of appointments. As such, it provides an accurate baseline count.

5.8	19	46	299
Average number of individual counseling sessions received by clients.	Percent of intake clients who received priority assignment to counseling.	Percent of clients who started 1st session of counseling within 2 weeks of intake.	No. of emergency appointments; up 23.6% over 2015-16.

Top Concerns on the Symptom Scale



Poor Concentration 1,312	Decision-Making Difficulty 848
Nervousness 1,223	Hopelessness 775
Sadness 924	Irritability/Anger 755
Low Self-Esteem 914	Low Energy 759
Fearfulness 848	Sleep Difficulty 667

Client Suicide Risk at Intake

At intake, Counseling Service clients completed the CelestHealth Behavioral Health Measure-43 (BHM-43), which provides a global mental health score and severity levels on several symptom subscales. The results were used in conjunction with the clinical interview to assist in suicide assessment and treatment planning.

Percent of Suicide Risk Level

	2015-2016 (N = 1,946)	2016-2017 (N = 2,182)
RISK LEVEL		
No Risk	66%	65%
Low Risk	23%	22%
Moderate Risk	6%	6%
High Risk	5%	7%

Percentages may reflect clients who completed more than one BHM-43 due to having more than one intake in the reporting year.

APPENDIX B | NCAA Core Values

The NCCA's Core Values are as follow:

“The Association – through its member institutions, conference and national office staff – shares a belief in and commitment to:

- **The collegiate model of athletics** in which students participate as an avocation, balancing their academic, social and athletics experiences.
- **The highest levels of integrity and sportsmanship.**
- **The pursuit of excellence in both academics and athletics.**
- **The supporting role that intercollegiate athletics plays** in the higher education mission and in enhancing the sense of community and strengthening the identity of member institutions.
- **An inclusive culture** that fosters equitable participation for student-athletes and career opportunities for coaches and administrators from diverse backgrounds.
- **Respect** for institutional autonomy and philosophical differences.
- **Presidential leadership** of intercollegiate athletics at the campus, conference and national levels.”²²⁵

²²⁵ NCAA, “NCAA Core Values.”

APPENDIX C | Division I Legislation: 16.5 Housing and Meals

NCAA Division I Legislation concerning student-athletes' housing and meals.²²⁶

Division: I

Legislative Cite: 16.5.1

Title: General Rule.

Text:

16.5.1 General Rule. [A] An institution is required to apply the same housing policies to student-athletes as it applies to the student body in general. During the academic year, the institution may not house student-athletes in athletics dormitories or athletics blocks within institutional or privately owned dormitories or apartment buildings (when the institution arranges for the housing) on those days when institutional dormitories are open to the general student body **[R]** *(Adopted: 10/1/01 effective 8/1/02, Revised: 8/7/14)*

Major Infractions Cases

Reported Date	Institution
December 10, 2008	Alabama State University

Proposals

Proposal Number	Title
1999-71	PERMISSIBLE HOUSING AND MEALS -- NUTRITIONAL SUPPLEMENTS
1999-31	INCIDENTAL BENEFITS -- SNACK

Division: I

Legislative Cite: 16.5.1.1

Title: Athletics Dormitories.

Text:

16.5.1.1 Athletics Dormitories. [A] Athletics dormitories shall be defined as institutional dormitories in which at least 50 percent of the residents are student-athletes. *(Adopted: 1/10/91 effective 8/1/96, Revised: 11/1/01 effective 8/1/02, 8/7/14)*

Division: I

Legislative Cite: 16.5.1.2

Title: Athletics Blocks.

Text:

16.5.1.2 Athletics Blocks. [A] Athletics blocks shall be defined as individual blocks, wings or floors within institutional dormitories or privately owned dormitories or apartment buildings in which at least 50 percent of the residents are student-athletes. *(Adopted: 1/10/91 effective 8/1/96, Revised: 1/10/92, 11/1/01 effective 8/1/02, 8/7/14)*

²²⁶ NCAA, "Division I Legislation."

Division: I

Legislative Cite: 16.5.1.3

Title: Exception -- Nondiscriminatory Housing Policies.

Text:

16.5.1.3 Exception -- Nondiscriminatory Housing Policies. [A] The prohibition against the use of athletics dormitories or blocks does not apply when the institution demonstrates that its housing assignment policies do not differentiate between student-athletes and students generally. *(Adopted: 1/16/93 effective 8/1/96, Revised: 11/1/01 effective 8/1/02, 8/7/14)*

Major Infractions Cases

Reported Date	Institution
October 24, 2000	University of Minnesota, Twin Cities

APPENDIX D | Timeline of Incident Involving Jordan McNair

Timeline of the order of events leading up to Jordan McNair's death, created by the consultants of Walters Inc.²²⁷

Date/Time	Description of Activity
5/29 16:24:00	Team flexibility and dynamic warmup
5/29 16:40:00	Team start of testing
5/29 16:41:00	Line run first of ten reps
5/29 16:41:20	Lineman last wave of runners
5/29 16:53:00	Heat Cramps/Heat exhaustion presentation
5/29 16:54:25	Rep #8 by Linemen
5/29 16:58:45	Rep #10 by Linemen
5/29 17:22:12	McNair taken from field via Gator
5/29 17:26:05	Nordwall accessed athletic training room
5/29 17:50:00	Mental status change - subsequent seizure - airway obstruction (mucous)
5/29 17:52:00	Steve Nordwall call to Dr. Cothran
5/29 17:55:00	Caller (Steve) calls into UMPD
5/29 18:02:00	Wes call to campus security - alerted of respiratory distress
5/29 18:03:33	1st ambulance & MPO Walker arrive onscene w/ stretcher
5/29 18:06:00	Dispatcher initiates priority response since patient seizing
5/29 18:10:57	2nd ambulance arrives onscene front of Gossett
5/29 18:11:44	2nd ambulance drives from front Gossett around back to Field
5/29 18:27:03	2nd ambulance leaves from Field
5/29 18:36:00	Arrives at Washington Adventis

²²⁷ Walters Inc., "An Independent Evaluation," 78.

APPENDIX E | Facilities Master Plan 2011-2030 and 2017-2030 Update

Phased planning of facilities on the University of Maryland campus, specifically residential ones.^{228, 229}

Campus Core	Site	Project	Building Type	GSF	Floors
Planning Period 1	S1	Architecture Building Additions	Academic	122,250	3
	S2	School of Public Policy Building and Site Development	Academic	74,800	4
	S3	Public Protection and Security Research Building, SCUB Expansion and Site Development	Academic	134,000	5
	S4	Van Munching Hall Addition/Renovation	Academic	15,282	4
	S5	Visual Arts and Cultures Building	Academic	112,300	4
	S6	Prince Frederick Hall (463 Beds), SCUB Expansion and Site Development	Auxiliary	159,100	6
	S7	South Campus Recreation Building	Auxiliary	70,000	3
	S8	Worcester Hall Replacement (233 beds), SCUB Expansion and Site Development	Auxiliary	84,600	4
Planning Period 2	S9	Behavioral and Social Sciences Research Building	Academic	120,000	5

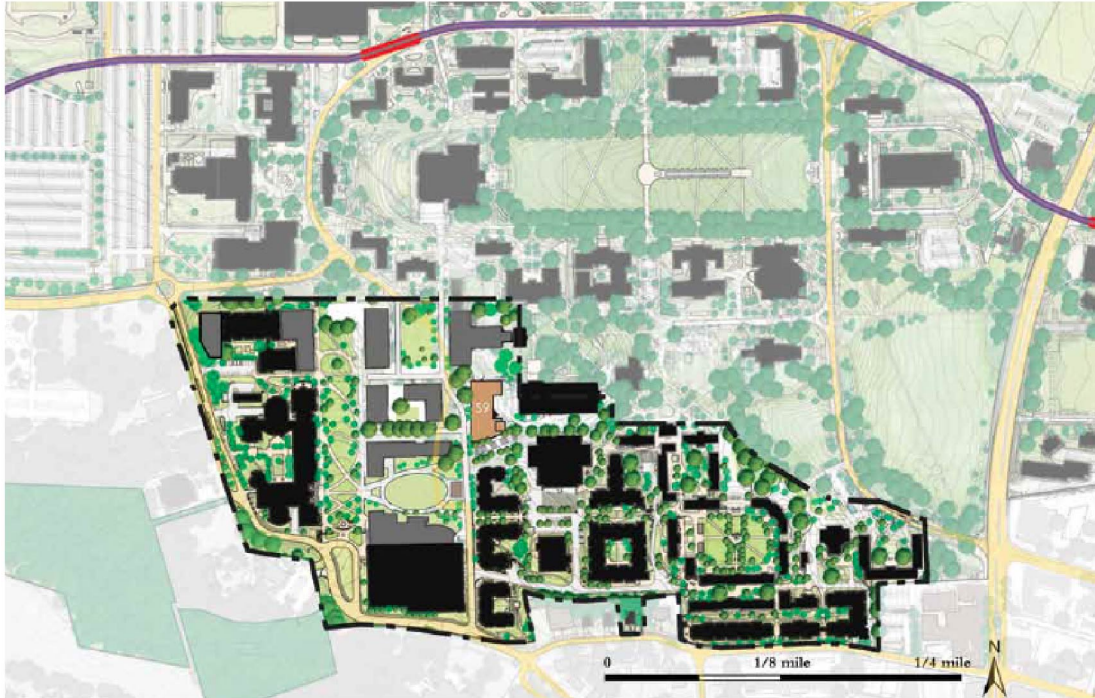
South District Buildings



South District Planning Period 1

²²⁸ UMD Facilities Management, "Facilities Master Plan 2011-2030," 68-114.

²²⁹ UMD Facilities Management, "Facilities Master Plan 2017-2030 Update," 34-35.



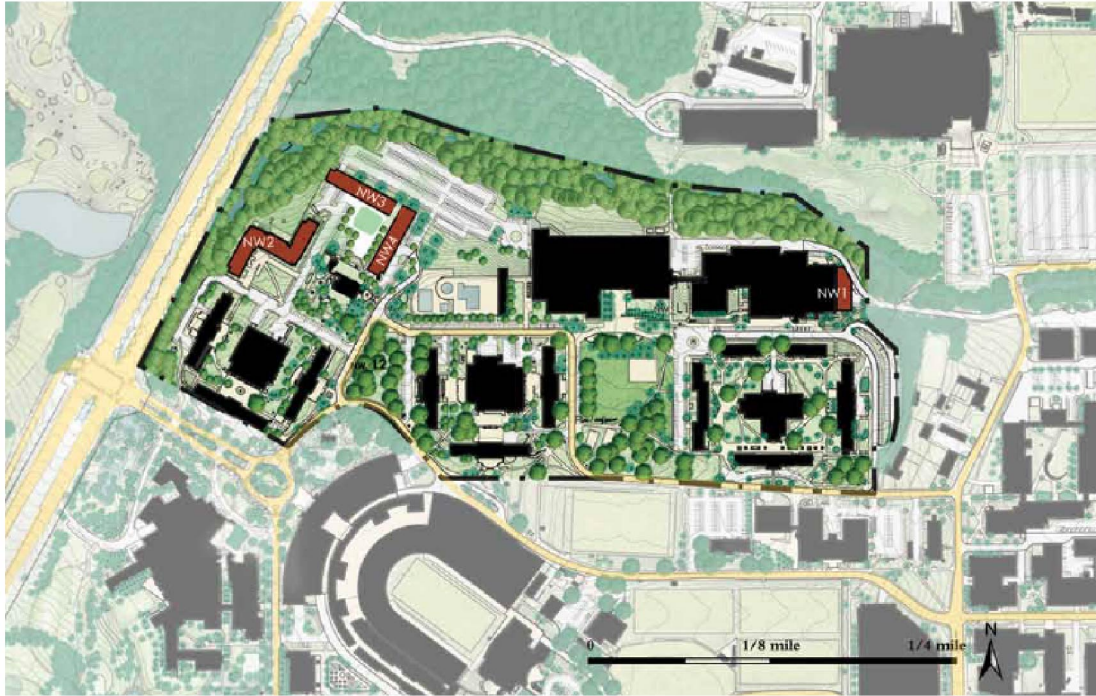
South District Planning Period 2

Northwest	Site	Project	Building Type	GSF	Floors
Planning Period 1	NW1	School of Public Health Building Addition/Conversion - Phase II	Academic	27,299	3
	NW2	Oakland Hall (711 beds)	Auxiliary	231,704	8
	NW3	Undergraduate Housing 1 (515 Beds)	Auxiliary	169,950	9
	NW4	Undergraduate Housing 2 (515 Beds)	Auxiliary	169,950	9
Planning Period 2	NW5	Replacement housing (650 beds) & Residential Facilities Relocation	Auxiliary	240,300	8

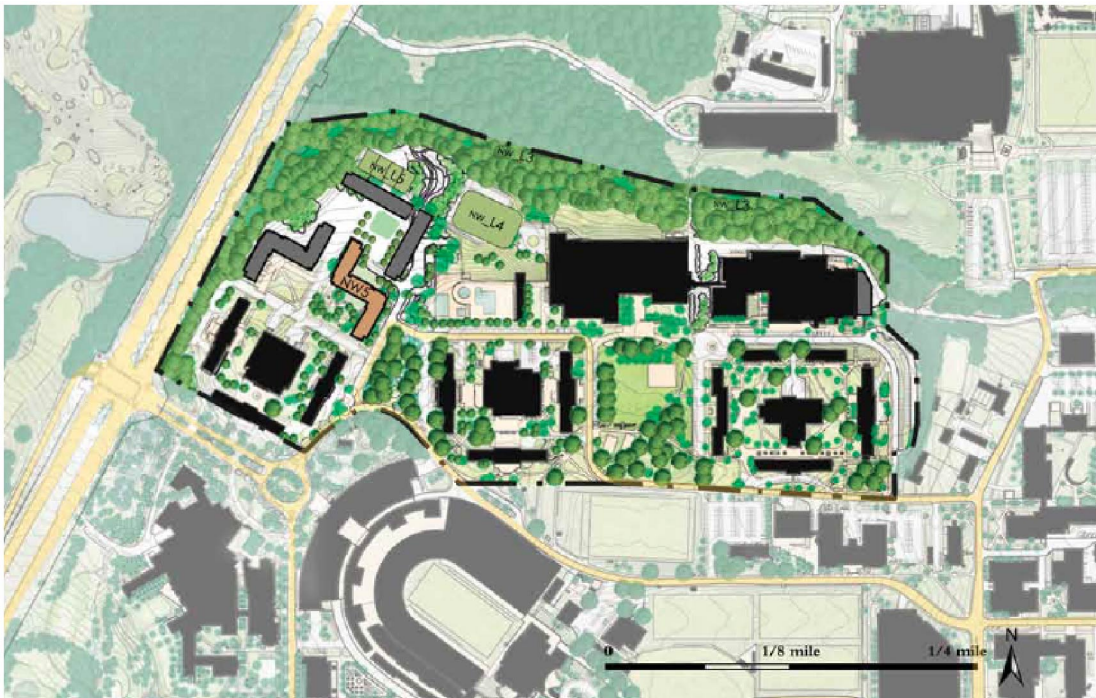
Northwest District Buildings

Planned New Construction July 2017 - December 2020				
Site	Building	District	GSF	
CC5	School of Public Policy Building and Site Development	CC	69,700	
GC1	Indoor Driving Range	GC	1,000	
NE8	Brendan Iribe Center for Computer Science and Innovation	NE	210,730	
NW6	Replace Ellicott Dining Hall	NW	57,750	
NW7	New Residence Halls (900 beds)	NW	303,500	
W3	New Cole Fieldhouse	W	420,460	
			Total	1,063,140

Northwest District Buildings Update



Northwest District Planning Period 1



Northwest District Planning Period 2

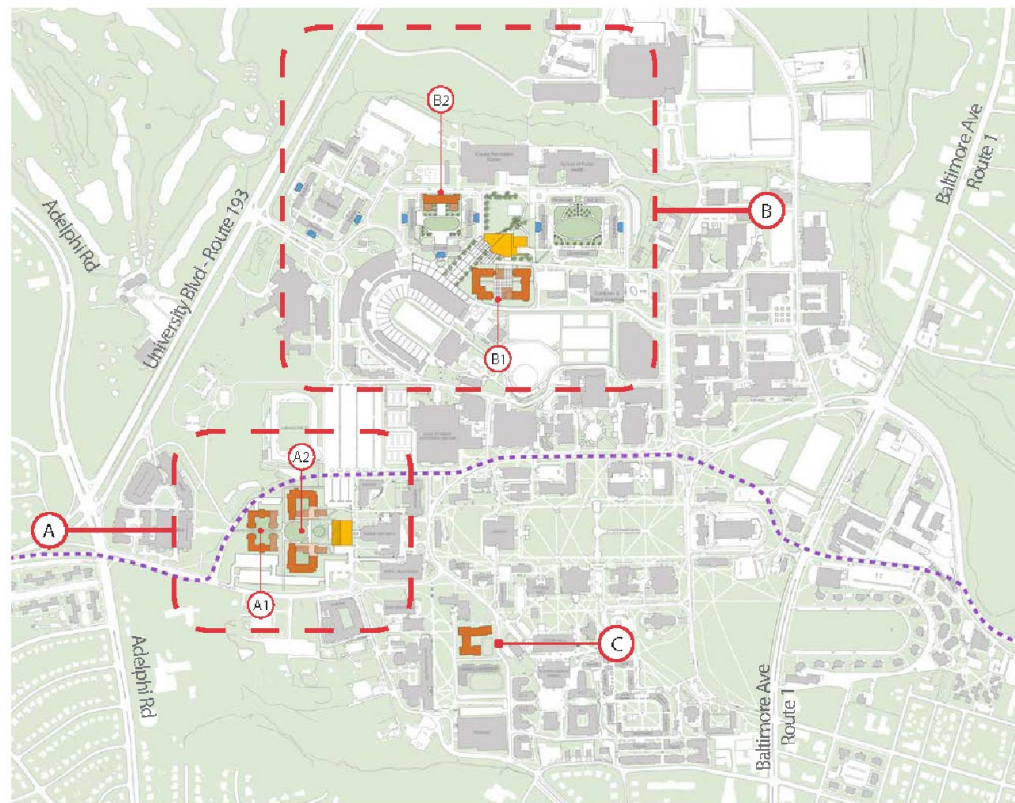
APPENDIX F | On-Campus Student Housing Strategic Plan 2014

Phasing of residential facilities on the University of Maryland Campus, as planned by the Department of Resident Life.²³⁰

SITE SCENARIOS

The On-Campus Student Housing Strategic Plan (SHSP) focuses new housing construction on three locations: Lot 1, Ellicott Community, and the current Carroll, Caroline and Wicomico site.

PROJECT	BEDS	OPENING
A Lot 1		
A1 Phase 1	800	Fall 2018
A2 Phase 2	700	Fall 2019
B North Campus		
B1 Varsity Practice Field	880	Fall 2021
B2 New Ellicott Community Building	350	Fall 2023
C South Campus - New North Hill Building	450	Fall 2022






2013 SHSP Site Plan

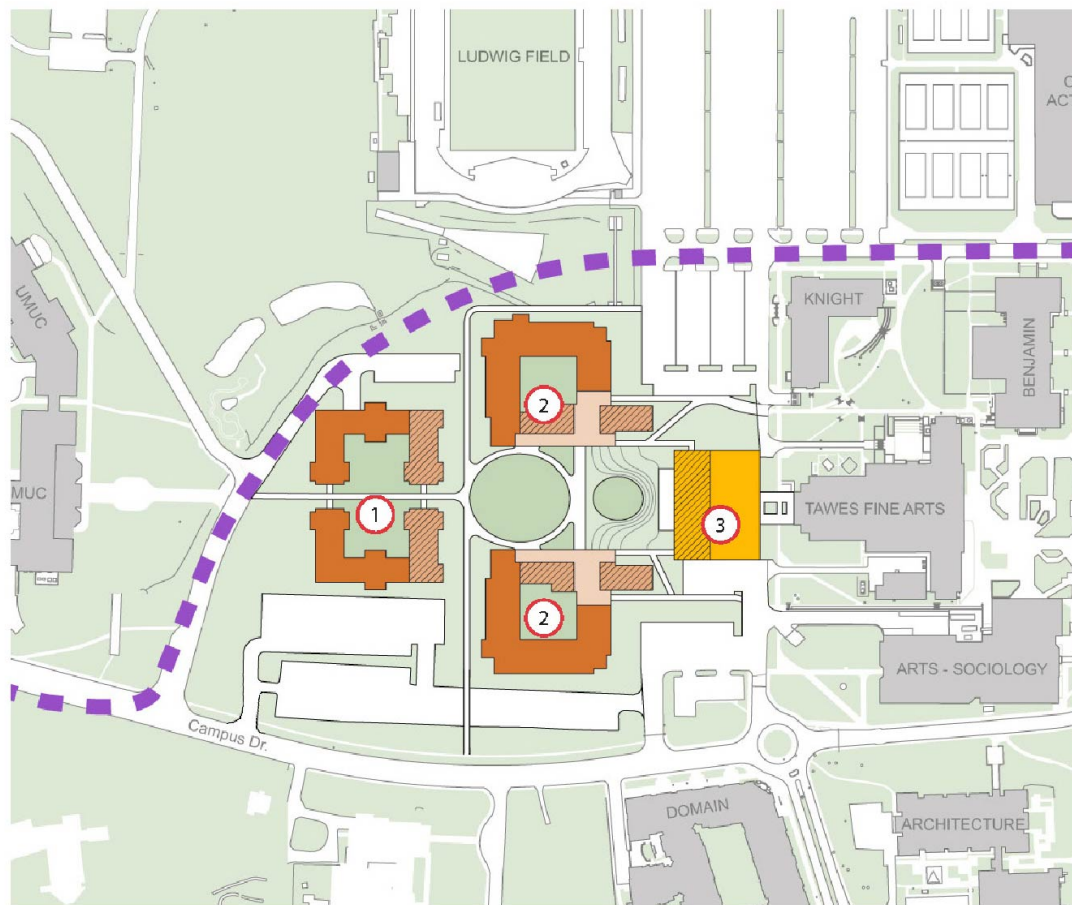
Note: Purple Line route approximate; related site improvements not shown.

- New Residential Construction
- New Dining Construction / Expansion / Academic Center
- Living Room Additions
- Purple Line Route

Future Residential Sites

²³⁰ UMD Department of Resident Life, "On-Campus Student Housing Strategic Plan 2014," 41-47.






ID	PROJECT	BEDS	OPENING
 1	Lot 1 - Phase 1	800 Beds	Fall 2018
 2	Lot 1 - Phase 2	700 Beds	Fall 2019
 3	New Dining		Fall 2019
	Academic on Ground Floor		

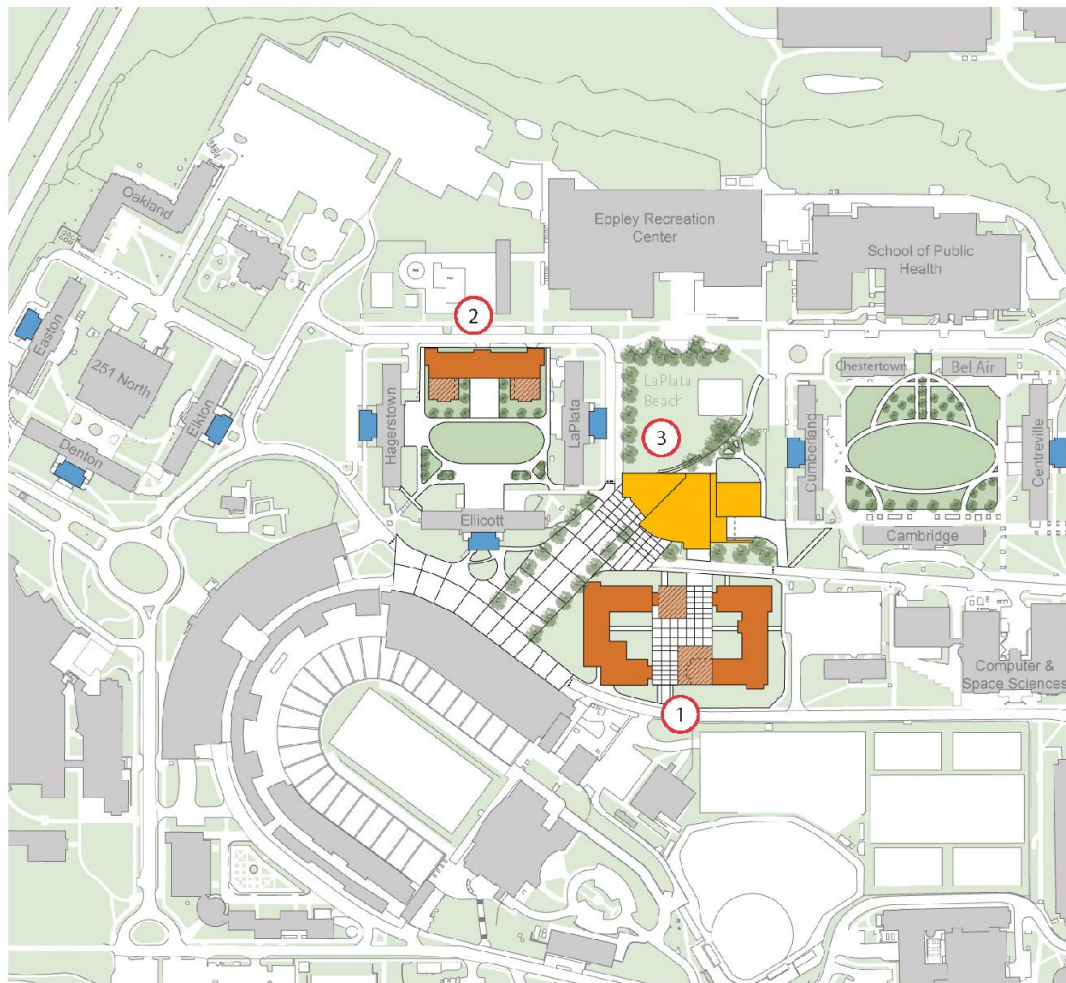


Site Plan

Note: Purple Line route approximate; related site improvements not shown.

Lot 1 Site Phasing
(Cancelled due to Cole Field House expansion and Purple Line)

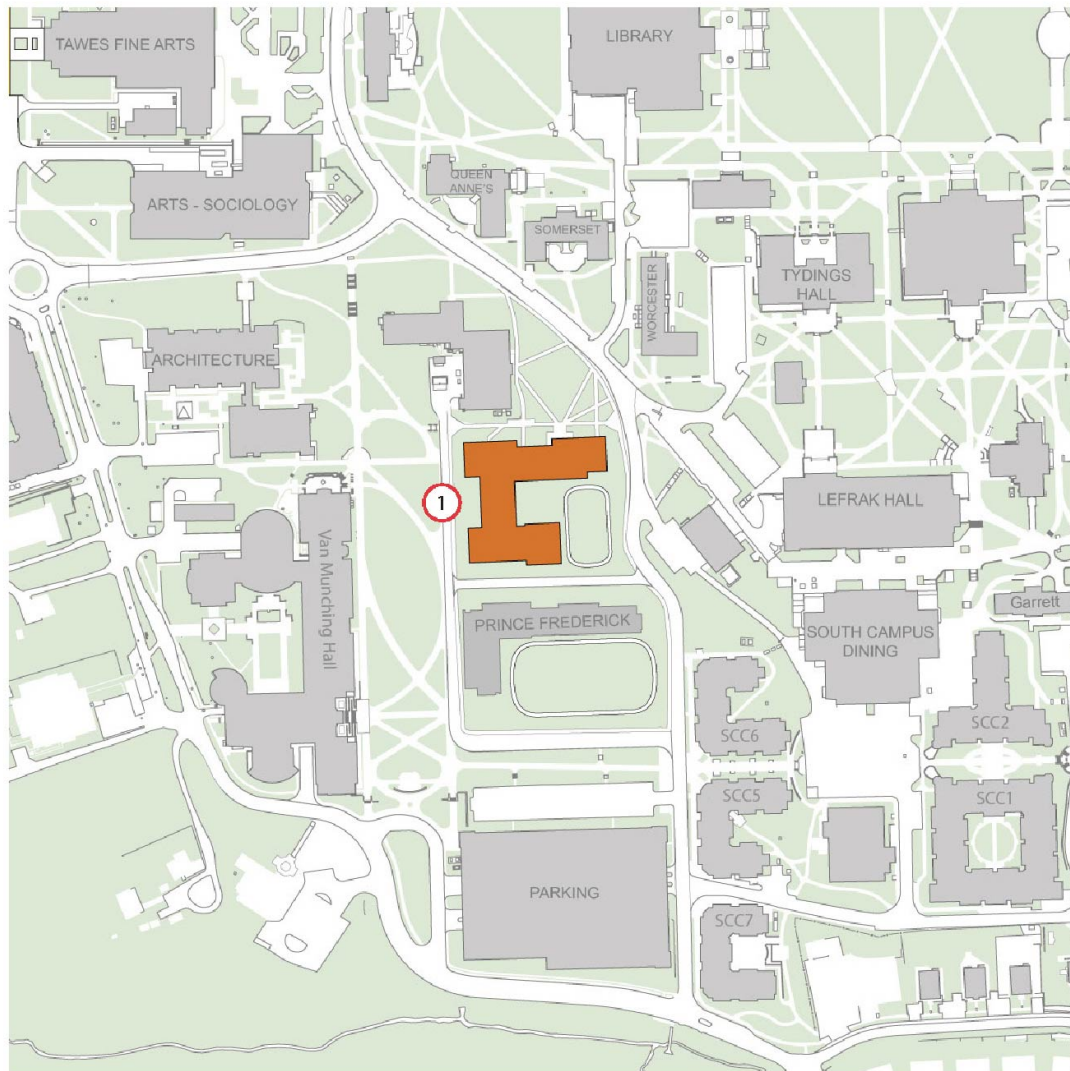
ID	PROJECT	BEDS	OPENING
 1	Varsity Practice Field	880 Beds	Fall 2021
 2	New Ellicott Community Building	350 Beds	Fall 2023
 3	New Dining + Academic		Fall 2021
	Academic on Ground Floor		
	Living Room Additions		



Site Plan

North Campus Site Phasing

ID	PROJECT	BEDS	OPENING
1	New North Hill Building	450 Beds	Fall 2022
	Academic on Ground Floor (not shown)		



Site Plan

South Campus Site Phasing

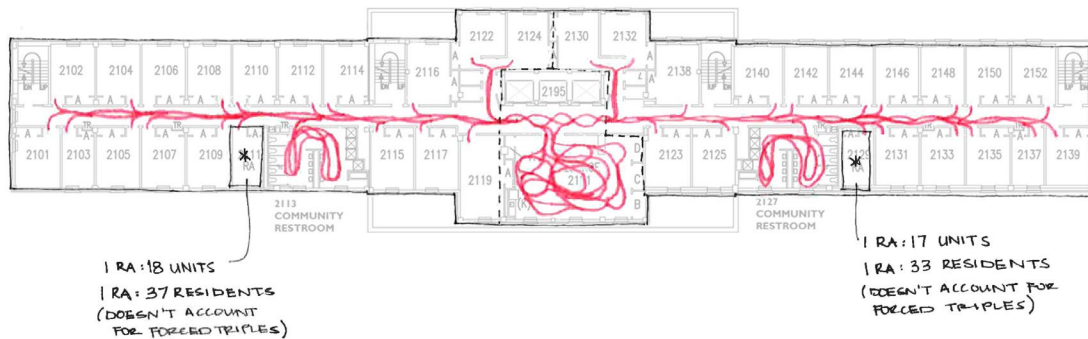
APPENDIX G | UMD Residential Unit Typologies and Aggregations

This study looks at five different residence halls on the University of Maryland campus and how the varying units and spaces are combined to make a community, or lack thereof. A “community” can be the number of units to a Resident Advisor unit or more subjectively, the quality and amount of interactions between people in a number of different spaces.

Elkton Hall:



Elkton Hall, typical floor

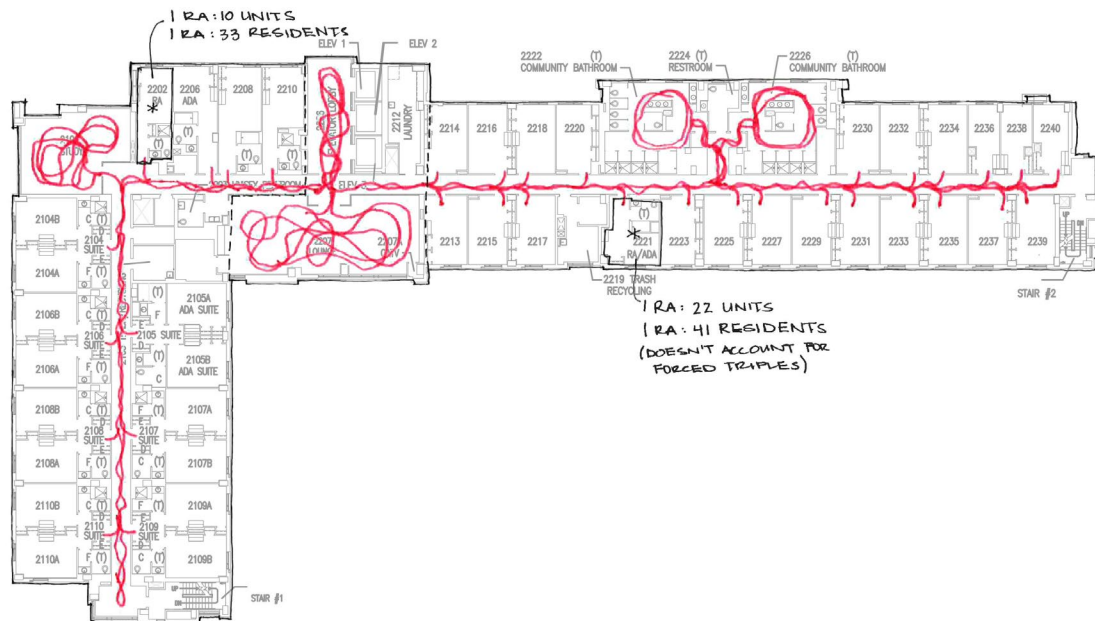


Elkton Hall, amount of interactions between people and size of community on a typical floor

Prince Frederick Hall:



Prince Frederick Hall, typical floor

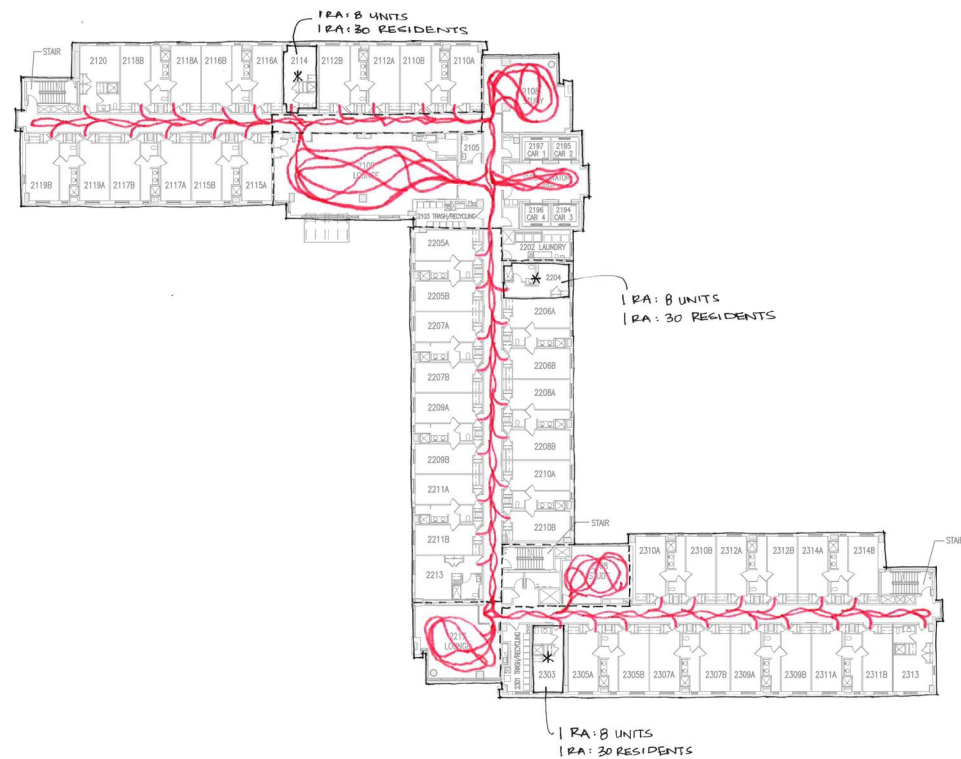


Prince Frederick Hall, amount of interactions between people and size of community on a typical floor

Oakland Hall:

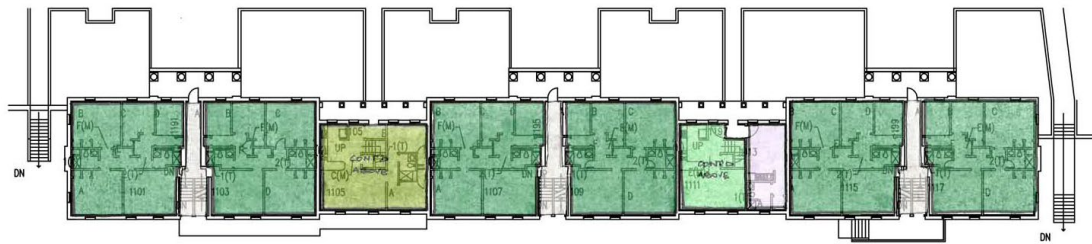


Oakland Hall, typical floor



Oakland Hall, amount of interactions between people and size of community on a typical floor

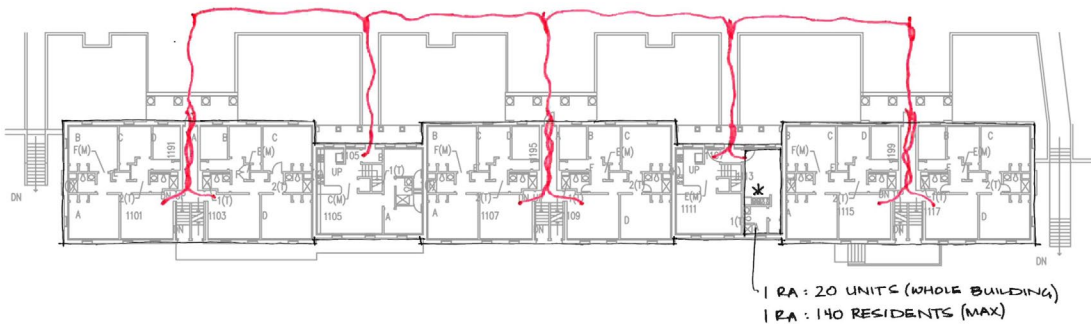
Washington Hall:



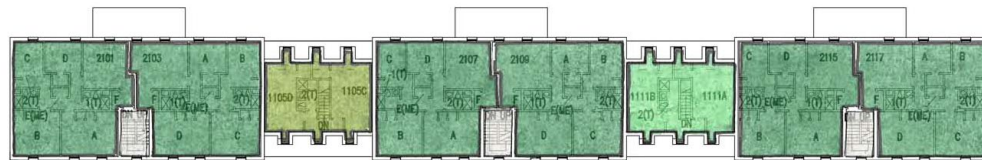
KEY

- 1 BR SEMI-SUITE
- 4 BR SUITE
- 2 BR APARTMENT
- 4 BR APARTMENT
- CIRCULATION

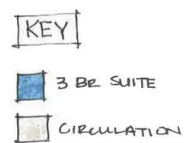
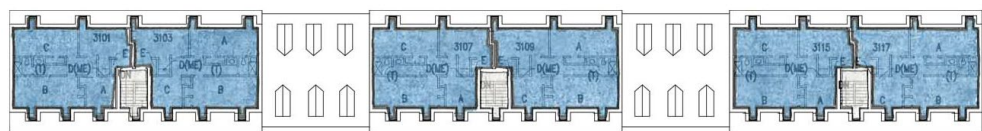
Washington Hall, first floor



Washington Hall, amount of interactions between people and size of community on the first floor



Washington Hall, second floor (little to no interactions outside of units)



Washington Hall, third floor (little to no interactions outside of units)

Montgomery Hall:



Montgomery Hall, ground floor (little to no interactions outside of units)



Montgomery Hall, first floor



Montgomery Hall, amount of interactions between people and size of community on the first floor

Bibliography

- American Institutes for Research. *Summary results from the 1987-1988 national study of intercollegiate athletics*, Report No. 1. Palo Alto, CA: Center for the Study of Athletics, 1988. Quoted in Edward F. Etzel, A.P. Ferrante, and James W. Pinkney. *Counseling College Student-Athletes: Issues and Interventions, Second Edition*. Morgantown, WV: Fitness Information Technology, Inc., 1996.
- ArchDaily. "Vejle Psychiatric Hospital / Arkitema Architects." Accessed October 17, 2018. <https://www.archdaily.com/901732/vejle-psychiatric-hospital-arkitema-architects>.
- Arkitema Architects. "Vejle Psychiatric Hospital." Accessed October 17, 2018. <https://arkitema.com/da/arkitektur/sundhed/psykiatrisygehus-i-vejle>.
- Azar, Frederick, Bonnie Bernstein, Hon. Robert Ehrlich, Jr., Hon. Benson Legg, Hon. C. McMillen, Charles Scheeler, Hon. Alexander Williams, Jr., and Douglas Williams. "Report to the University System of Maryland of an Independent Investigation of the University of Maryland Football Program." October 23, 2018. <https://www.usmd.edu/newsroom/Report-to-USM-Independent-Investigation-UMD-Footbal-10-23-2018.pdf>.
- Bell, J., & T. Doege. "Athletes' use and abuse of drugs." *The Physician and Sportsmedicine*, 15 (1987): 99-108. Quoted in Edward F. Etzel, A.P. Ferrante, and James W. Pinkney. *Counseling College Student-Athletes: Issues and Interventions, Second Edition*. Morgantown, WV: Fitness Information Technology, Inc., 1996.

Crowley, Colleen M. "On the Well Track." *MarylandToday*, September 11, 2018.

<https://today.umd.edu/articles/well-track-461decac-26f9-4483-8d2f-6609a61b029e>.

Day, Christopher. *Spirit & Place*. Oxford: Architectural Press, 2002.

Dinich, Heather, Adam Rittenberg, and Tom VanHaaren. "The inside story of a toxic culture at Maryland football." *ESPN*, August 10, 2018.

http://www.espn.com/college-football/story/_/id/24342005/maryland-terrapins-football-culture-toxic-coach-dj-durkin.

EFFEKT. "Livsrums Cancer Counseling Center." Accessed October 17, 2018.

<https://www.effekt.dk/liv>.

Etzel, Edward F., A.P. Ferrante, and James W. Pinkney. *Counseling College Student-Athletes: Issues and Interventions, Second Edition*. Morgantown, WV: Fitness Information Technology, Inc., 1996.

Farrell, Liam. "Student-Athletes Get Online Tool to Report Concerns." *MarylandToday*, August 28, 2018. <https://today.umd.edu/articles/student-athletes-get-online-tool-report-concerns-e5bb761a-b76c-4f54-8ecd-3752221563fe>.

Furuto, Alison. "Cancer Counseling Center Proposal / EFFEKT." ArchDaily. Last modified March 25, 2012. Accessed October 17, 2018.

<https://www.archdaily.com/218702/cancer-counseling-center-proposal-effekt>.

Heyman, S.R. "Psychological problem patterns found with athletes." *The Clinical Psychologist*, 34 (1986): 68-71. Quoted in Edward F. Etzel, A.P. Ferrante, and James W. Pinkney. *Counseling College Student-Athletes: Issues and*

Interventions, Second Edition. Morgantown, WV: Fitness Information Technology, Inc., 1996.

Hipple, J. "Do athletes have special counseling needs?" *Texas Personnel and Guidance Association*, 19 (1991): 57-62. Quoted in Edward F. Etzel, A.P. Ferrante, and James W. Pinkney. *Counseling College Student-Athletes: Issues and Interventions, Second Edition*. Morgantown, WV: Fitness Information Technology, Inc., 1996.

Jensen & Skodvin Architects. "Tautra Monastery." Accessed October 17, 2018.

<https://jsa.no/TAUTRA-MARIAKLOSTER-A-Cistercian-nuns-monastery>.

Lanning, W. "The privileged few: Special counseling needs of athletes." *Journal of Sport Psychology*, 4 (1982): 19-23. Quoted in Edward F. Etzel, A.P. Ferrante, and James W. Pinkney. *Counseling College Student-Athletes: Issues and Interventions, Second Edition*. Morgantown, WV: Fitness Information Technology, Inc., 1996.

Linder, D., B. Brewer, J. Van Raalte, & N. DeLange. "A negative halo for athletes who consult sports psychologists: Replication and extension." *Journal of Sport and Exercise Psychology*, 13 (1991): 133-148. Quoted in Edward F. Etzel, A.P. Ferrante, and James W. Pinkney. *Counseling College Student-Athletes: Issues and Interventions, Second Edition*. Morgantown, WV: Fitness Information Technology, Inc., 1996.

Linder, D., D. Pillow, & R. Reno. "Shrinking jocks: Derogation of athletes who consult a sport psychologist." *Journal of Sport and Exercise Psychology*, 11 (1989): 270-280. Quoted in Edward F. Etzel, A.P. Ferrante, and James W. Pinkney.

Counseling College Student-Athletes: Issues and Interventions, Second Edition.

Morgantown, WV: Fitness Information Technology, Inc., 1996.

Maese, Rick and Roman Stubbs. "U-Md. releases report on Jordan McNair, laying out timeline that led to player's death." *Washington Post*, September 21, 2018.

https://www.washingtonpost.com/sports/colleges/u-md-board-of-regents-releases-report-on-jordan-mcnair-laying-out-timeline-that-led-to-players-death/2018/09/21/49331ea0-bda9-11e8-b7d2-0773aa1e33da_story.html?utm_term=.c0c52e1a09f9.

Mind, Body and Sport: Understanding and Supporting Student-Athlete Mental Wellness.

Edited by Gary Brown. Indianapolis, IN: NCAA, 2014.

<http://www.ncaapublications.com/productdownloads/MindBodySport.pdf>.

National Center for Health Statistics (NCHS), National Vital Statistics System, and

Centers for Disease Control and Prevention (CDC). "10 Leading Causes of Death by Age Group, United States, 2016." https://www.cdc.gov/injury/images/lc-charts/leading_causes_of_death_age_group_2016_1056w814h.gif.

National Collegiate Athletic Association (NCAA). "Division I Legislation: 16.5 Housing and Meals." Legislative Services Database. Accessed November 14, 2018.

<https://web3.ncaa.org/lstdbi/search/bylawView?id=1259#result>

NCAA. "Mental Health Educational Resources." Accessed November 14, 2018.

<http://www.ncaa.org/sport-science-institute/mental-health-educational-resources>.

NCCA. "NCAA Core Values." Accessed November 14, 2018.

<http://www.ncaa.org/about/ncaa-core-values>.

NCAA. "NCAA Division I." Accessed November 14, 2018.

<http://www.ncaa.org/about?division=d1>.

NCAA. "NCAA National Study on Substance Use Habits of College Student-Athletes."

Executive Summary, June 2018,

http://www.ncaa.org/sites/default/files/2017RES_Substance_Use_Executive_Summary_FINAL_20180611.pdf.

NCAA. "Our Three Divisions." Accessed November 14, 2018.

<http://www.ncaa.org/about/resources/media-center/ncaa-101/our-three-divisions>.

NCAA. "Results from the 2015 GOALS Study of the Student-Athlete Experience."

NCAA Convention, 2016,

http://www.ncaa.org/sites/default/files/GOALS_convention_slidebank_jan2016_public.pdf.

NCAA. "What is the NCAA?" Accessed November 14, 2018.

<http://www.ncaa.org/about/resources/media-center/ncaa-101/what-ncaa>.

NCAA Sport Science Institute. "Mental Health Best Practices: Understanding and

Supporting Student-Athlete Mental Wellness." Interassociation Consensus

Document, revised 2017. Accessed November 14, 2018.

http://www.ncaa.org/sites/default/files/SSI_MentalHealthBestPractices_Web_20170921.pdf.

Newman Architects. "Headington Hall." Accessed October 17, 2018.

<https://www.newmanarchitects.com/headington-hall/>.

Nickl-Weller, Christine and Hans Nickl. *Healing Architecture*. Munich: Braun

Publishing, 2013.

NORD Architects. "Cancer Centre." Accessed October 17, 2018.

<https://www.nordarchitects.dk/cancercentre>.

Ogilvie, B.C., W.P. Morgan, C.M. Pierce, D.B. Marcotte, and A.J. Ryan. "The emotionally disturbed athlete." *The Physician and Sportsmedicine*, 9 (1981): 67-80. Quoted in Edward F. Etzel, A.P. Ferrante, and James W. Pinkney. *Counseling College Student-Athletes: Issues and Interventions, Second Edition*. Morgantown, WV: Fitness Information Technology, Inc., 1996.

Rao, A.L., I.M. Asif, J.A. Drezner, B.G. Toresdahl, and K.G. Harmon. "Suicide in National Collegiate Athletic Association (NCAA) Athletes: A 9-Year Analysis of the NCAA Resolutions Database." *Sports Health*, 7(5) (September 2015): 452-475.

Rosen, L.W., D.B. McKeag, D.O. Hough, and V. Curley. "Pathogenic weight control behavior in female athletes." *The Physician and Sportsmedicine*, 14 (1986): 79-86. Quoted in Edward F. Etzel, A.P. Ferrante, and James W. Pinkney. *Counseling College Student-Athletes: Issues and Interventions, Second Edition*. Morgantown, WV: Fitness Information Technology, Inc., 1996.

Scholars Promoting and Revitalizing Care (SPARC). "#30DaysTooLate." Accessed December 2, 2018. <https://umdsparc.com/30daystoolate/>.

SPARC. "Our Mission and Goal." Accessed December 2, 2018. <https://umdsparc.com/mission-and-goal/>.

SPARC. "UMD Mental Health Care Survey." Accessed December 2, 2018. <https://umdsparc.com/mental-health-survey/>.

Sperber, M. *College sports inc.: The athletic department versus the university*. New York: Henry Holt, 1990. Quoted in Edward F. Etzel, A.P. Ferrante, and James W. Pinkney. *Counseling College Student-Athletes: Issues and Interventions, Second Edition*. Morgantown, WV: Fitness Information Technology, Inc., 1996.

STUDIOARCHITECTURE. "Headington Hall." Accessed October 17, 2018.

<https://studioarc.com/projects/headington-hall/>.

Thompson, Ron A., Roberta Trattner Sherman, and Bloomington Center for Counseling and Human Development. "Managing Student-Athletes' Mental Health Issues."

National Collegiate Athletic Association, 2007. Accessed October 21, 2018.

https://www.ncaa.org/sites/default/files/2007_managing_mental_health_0.pdf.

University of Maryland (UMD). "History and Mission." Accessed December 1, 2018.

<https://www.umd.edu/history-and-mission>.

UMD. "Our Football Program." Office of the President, Communications. Last modified October 31, 2018. <https://president.umd.edu/communications/statements/our-football-program>.

UMD. "The Commission Report and the Path Forward." Office of the President, Communications. Last modified October 30, 2018.

<https://president.umd.edu/communications/statements/commission-report-and-path-forward>.

UMD. "Timeline." Accessed December 1, 2018. <https://www.umd.edu/history-and-mission/timeline>.

UMD Counseling Center. "Our Mission." Accessed December 2, 2018.

<https://www.counseling.umd.edu/aboutus/mission/>.

UMD Department of Resident Life. "Communication Shared with Students regarding Mold Concerns." Accessed December 11, 2018.

<http://reslife.umd.edu/moldconcerns/>.

UMD Department of Resident Life. "On-Campus Student Housing Strategic Plan 2014." Accessed September 30, 2018.

<http://reslife.umd.edu/global/documents/hsp/umdchsp.pdf>.

UMD Division of Student Affairs Counseling Center. "Counseling Center 58th Annual Report, 2016-2017." Accessed December 2, 2018.

<https://www.counseling.umd.edu/global/docs/aboutus/annualreport.pdf>.

UMD Division of Student Affairs Office of the Vice President. "Letter to the Campus Community Regarding Mental Health." Last modified April 2, 2018.

<https://studentaffairs.umd.edu/news/letter-to-the-campus-community-regarding-mental-health>.

UMD Facilities Management. "Facilities Master Plan 2011-2030." Accessed September 30, 2018. <https://www.facilities.umd.edu/documents/fmp/2011-2030%20facilities%20Master%20Plan.pdf>.

UMD Facilities Management. "Facilities Master Plan 2017-2030 Update." Accessed September 30, 2018.

https://www.facilities.umd.edu/Documents/FMPUpdate2017_approvedWeb.pdf.

UMTerps. "Team Announces Plans to Honor McNair." Last modified August 20, 2018.

<https://umterps.com/news/2018/8/20/football-team-announces-plans-to-honor-mcnair.aspx?path=football>.

- UMTerps. "Terps Open Season with 34-29 Win Over #23 Texas." Last modified September 1, 2018. <https://umterps.com/news/2018/9/1/football-terps-comeback-to-top-23-texas-34-29.aspx?path=football>.
- University of Oklahoma. "Headington Hall – Amenities." Accessed October 17, 2018. http://www.soonersports.com/ViewArticle.dbml?&DB_OEM_ID=31000&ATCLID=208803931.
- University of Oklahoma. "Headington Hall – Welcome." Accessed October 17, 2018. <https://www.chicagomanualofstyle.org/turabian/turabian-notes-and-bibliography-citation-quick-guide.html>.
- Van Raalte, J., B. Brewer, D. Brewer, and D. Linder. "NCAA Division II college football players' perceptions of an athlete who consults a sport psychologist." *Journal of Sport and Exercise Psychology*, 14 (1992): 273-282. Quoted in Edward F. Etzel, A.P. Ferrante, and James W. Pinkney. *Counseling College Student-Athletes: Issues and Interventions, Second Edition*. Morgantown, WV: Fitness Information Technology, Inc., 1996.
- Walters Inc. – Consultant in Sports Medicine. "An Independent Evaluation of Procedures and Protocols Related to the June 2018 death of a University of Maryland Football Student-athlete." Last modified September 21, 2018. <https://assets.documentcloud.org/documents/4918313/Investigation-in-death-of-Maryland-football.pdf>.